Modern LITHOGRAPHY

TECHNOLOGY DEPT.

LIBRARY
2 5 195
TROIT

In this issue

Printing Week Roundup
Stripping with Stripfilm
Government Litho Shops
Eureka Celebrates 50 Years
Costa Rican Offset
ML Plant Tour No. 3

Printing Week

January 15-21

JANUARY, 1956

R v.24 Ja-De '56

Do you know the type?

W

A right jolly old face
That came 'cross the sea
From merry old England
With a long pedigree
Of sma-a-ashing success
In paper and book
For the thrifty amount
Of space that it took.
Yes—a close fitting face;
Condensed of a sort
With legibility
A definite forte.
It makes reading easy
On 'most any stock:
Antique or coated
Whichever you've got.
Its larger appearance
In a point size survey
Prompted Colliers to put it
To bed right away.
In promotional printing
It's won a high place.
Now I say—know the name
Of this Linotype face?

If you don't recognize this type
Read the turned slug below.

TIMES ROMAN (b'George) . . . by Linotype. Boiled down to benefits, you can pack a lot of legible copy into a little space when you use Times Roman. Linotype makes it available in sizes from 5½- to 14-point, in combination with *Italic* and SMALL CAPS, and in the same sizes plus 18- and 24-point with **Times Roman Bold**.

Care to see a specimen? Drop us a card at the address below and we'll send you a free specimen book of this popular, versatile face.

Mergenthaler Linotype Company, 29 Ryerson Street, Brooklyn 5, N.Y.

• LINOTYPE •

Set in Linotype Times Roman, Bodoni Book Italic, and members of the Spartan family

Agencies: Atlanta, Boston, Chicago, Cleveland, Dallas, Los Angeles, New York, San Francisco. **In Canada:** Canadian Linotype, Limited, Toronto, Ontario

LEADERSHIP THROUGH RESEARCH

Tech

Roberts & Porter service and Lanston equipment help Fine Arts Litho maintain its reputation!

Fine Arts Lithograph Co., Kansas City, Missouri, makes the most of the skill of men like ace cameraman Jim Heier by giving them the finest graphic arts equipment to work with. That's how they maintain their reputation for on-schedule delivery of *quality* lithography.

Roberts & Porter service and Lanston equipment just naturally fit into this picture!

You see, lithographers who specialize in *quality* work recognize the advantages of having Roberts & Porter as sales and service headquarters for Lanston Monotype photo-mechanical and plate-making equipment. For example, top cameramen everywhere sing the praises of the M-H Precision Overhead Camera. They like the wide-open accessibility that speeds copy-loading and adjustments. They like the way the M-H Camera *stays* calibrated. And they especially like the torque tube construction that so completely isolates the camera from building vibrations.

Find out how *you* can benefit from the advantages that come your way with Lanston Monotype equipment for *all* the graphic arts backed by that famous Roberts & Porter service. You'll get fast action by using the coupon *today*.

Ace cameraman, Jim Heier, adjusts M-H Precision Overhead Camera at Fine Arts Lithograph Co., Kansas City, Mo.

ROBERTS & PORTER
INCORPORATED

General Offices: 555 West Adams St., Chicago

NEW YORK
622-626 Greenwich

BOSTON
88 Broad St.

DETROIT
1025 Brush St.

BALTIMORE
5 South Gay St.

CINCINNATI
229 E. 6th St.

KANSAS CITY
1434 Wyandotte St.

PHILADELPHIA
1205 Hamilton St.

LOS ANGELES
344 N. Vermont Ave.

CLEVELAND
1825 East 18th St.

SAN FRANCISCO
1185 Howard St.

Roberts & Porter, Inc.
622-626 Greenwich St.
New York 14, N. Y

☐ I want to know more about the M-H Precision Overhead Camera.

☐ Send me literature on other Lanston Monotype equipment.

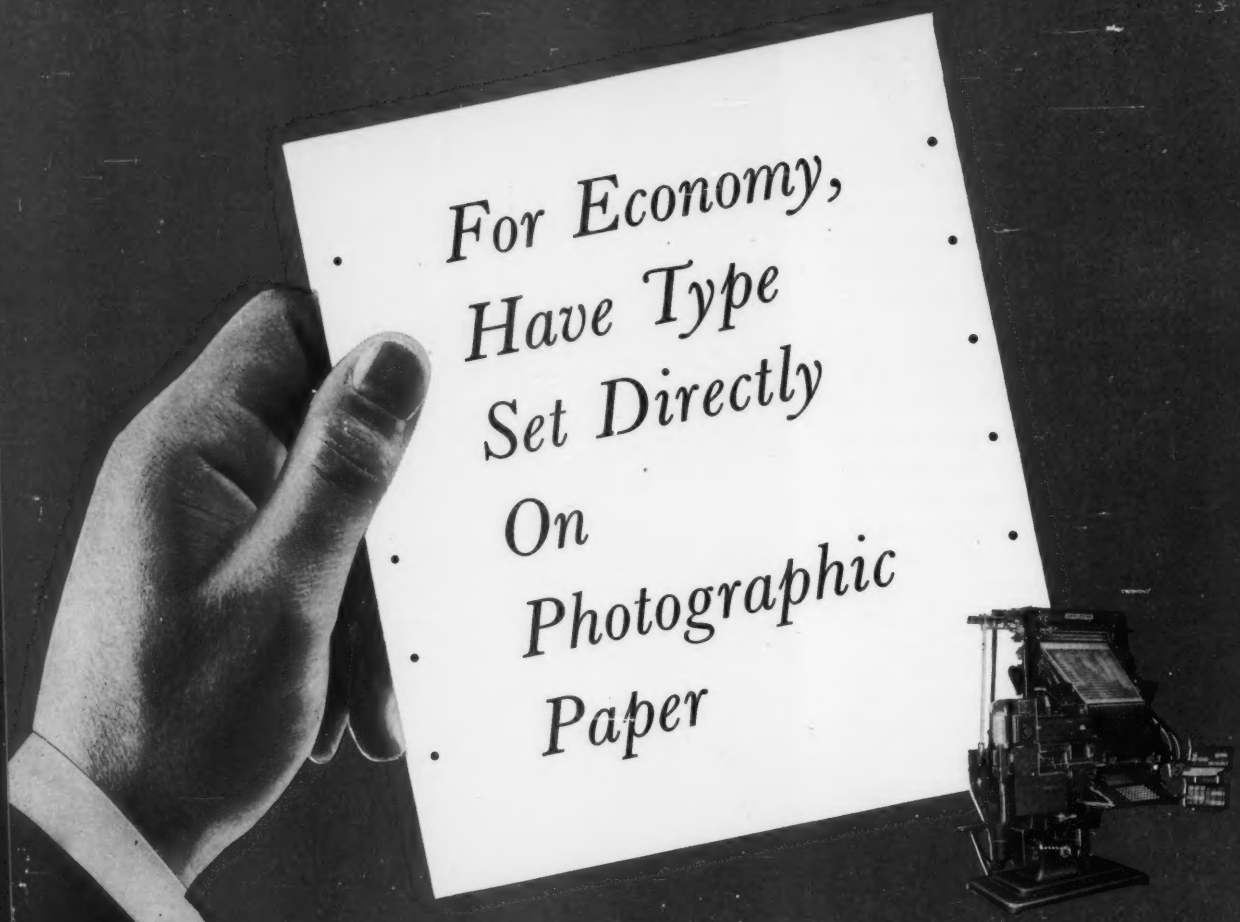
NAME_____

COMPANY_____

ADDRESS_____

CITY & ZONE_____ STATE_____

How to save money with FOTOSETTER composition . . .



Fotosetter composition makes perfect repros —sharp, clear, uniformly black and smudge-free, they need no retouching. All Fotosetter faces are available in all type sizes from 6 pt. to 36 pt. at keyboard speed economy. Enlargements to any desired size, even poster size, are easy to make and equally sharp.

It is not always necessary to have type set on film. For paste-ups and many other uses you can get your Fotosetter composition set directly on photographic paper, in this way saving darkroom time and materials. Look into the many advantages of Fotosetter composition for your typographic needs.

INTERTYPE CORPORATION

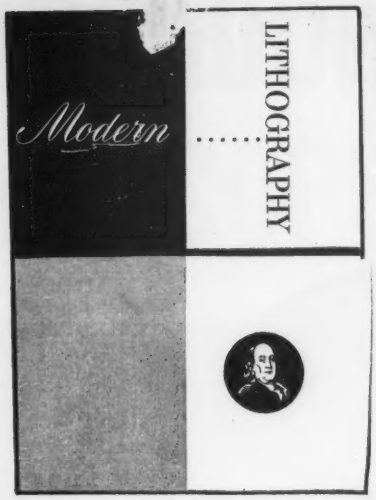
360 Furman Street, Brooklyn 1, New York

Chicago, San Francisco, Los Angeles, New Orleans, Boston

In Canada: Toronto Type Foundry Co. Ltd., Toronto, Montreal, Winnipeg, Vancouver, Halifax

If it isn't made by Intertype it isn't a FOTOSETTER

Fotosetter is a registered trademark • Fotosetter Futura and Baskerville



COVER

There are so many cities celebrating printing Week this year, it's hard to keep track of them all. However, we have done the best we can with the last minute reports assembled on page 52. The cover shows Ben Franklin, much in the news this month, and the dates of the observance.

WAYNE E. DORLAND
Publisher

HAMILTON C. CARSON
EDWARD J. MEIER
Associate Editors

RALPH DORLAND
Advertising Manager

CLIFFORD LINDEMAN
Circulation Manager

Feature Articles

After 50 Years Eureka Relies on Offset 38
Plant Tour No. 3: Magill-Weinsheimer 40
How To Strip With Stripfilm 41
By Bernard R. Halpern
Litho in Costa Rica 45
Government Litho Shops 46
By Mike Geary
Printing Week Roundup 50
Printability: More Science than Art 53
By Philip A. Cerasoli
Improved Magnesium Plates for Dry Offset 54
Finding Out Your Costs 56

Departments

Meeting Calendar 28
Editorial 37
Technical Section: History of Dampening 63
Technical Briefs 65
Litho Club News 71
Photographic Clinic 77
By Herbert P. Paschel
Metal Decorating Section Costs and Prices 79
By F. L. Heath
News About The Trade 85
Equipment, Supplies, Services 110
Classified Advertisements 131
Index to Advertisements 135
Tale Ends 136

MODERN LITHOGRAPHY

VOLUME 24, NUMBER 1 JANUARY, 1956

SUBSCRIPTION RATES: *One year, $3.00; two years, $5.00. Canada and Pan America, one year, $4.00; two years, $7.00. Foreign, one year, $9.00; two years, $15.00. Group subscription (U. S. only) Four or more entered as a group, $2.00 each. (May be sent to different addresses.)*

SINGLE COPIES: current issue: $0.50; all back numbers $1.00. Postage and handling charges for foreign countries on single copies: $1.00. Claims for missing numbers not allowed if received more than 60 days from date of mailing. No claims allowed from subscribers outside U. S. because of failure to notify Circulation Department of change of address, or because a copy is "missing from files."

Published monthly on the 5th by Industry Publications, Inc. Publication office: 123 Market Place, Baltimore 2, Md. Advertising, Subscription and Editorial Office: Box 31, Caldwell, N. J. Advertising rates made known on application. Closing date for copy — 10th of the month preceding month of issue. Reentered as Second Class Matter November 1, 1955, at the Post Office at Baltimore, Md., under the Act of March 3, 1879.

Address all correspondence to Box 31, Caldwell, N. J.

ANNOUNCING

Order by phone from your nearest Harris Dealer

Albuquerque, New Mexico
Jones Graphic Products Co. . . . 7-1405

Atlanta, Georgia
Harris-Seybold Co. . . . . LA 4576
M & F Supply Co. . . . . AL 4553

Baltimore, Maryland
Roberts & Porter, Inc. . . . . MU 5-1238
Interchemical Corporation
Printing Ink Div. . . . . MU 5-5720
Eastman Kodak Stores, Inc. . . . CH 3-9880
George R. Keller, Inc. . . . . HO 7-8414
John H. Burke & Co. . . . . LE 9-2154
Bowden Graphic Arts . . . . . LE 9-1553

Boston, Massachusetts
Roberts & Porter, Inc. . . . . HA 6-8654
Bridgeport Engraver's Supply Co. .
Frank Galvin, Inc. . . . . LI 2-6894
The Pitman Sales Co.
of New England, Inc. . . . . LI 2-5177
W. Oliver Tripp . . . . . LI 2-1018

Buffalo, New York
Buffalo Graphic Arts Supply, Inc. WA 5630

Charlotte, North Carolina
George R. Keller Co. 7-2355
Holly-Smith Co. . . . . ED 3-4302

Chicago, Illinois
Roberts & Porter, Inc. . . . . DE 2-4794
Martin Driscoll & Co. . . . . WA 2-9446
Gaetjens, Berger & Wirth, Inc. . . MO 6-4246
General Plate Makers Supply Co. . HA 7-1754
Harold M. Pitman Co. . . . . BI 2-1174
Eastman Kodak Stores . . . . . ST 2-8130
National Steel & Copper Plate . . WA 2-6440

Cincinnati, Ohio
Roberts & Porter, Inc. . . . . PA 2024
G. C. Dom Supply Co. . . . . MA 0902
McKinley Litho Supply Co. . . . LI 6323

Cleveland, Ohio
Harold M. Pitman Co. . . . . WI 1-5250
Roberts & Porter, Inc. . . . . CH 1-7515
Capitol Printing Ink Co., Inc. . . WY 1-7609

Dallas, Texas
Harris-Seybold Co. . . . . RA 8785-86
Lew Wenzel & Co. . . . . ST 1232

Dayton, Ohio
Arnett Enterprises . . . . . AD 6247

Denver, Colorado
Lew Wenzel & Co. . . . . AC 2-4306
Bartsch Service & Supply Co. . . AC 3839

Detroit, Michigan
Roberts & Porter, Inc. . . . . WO 2-8820
Michigan Litho Graining &
Supply, Inc. . . . . WO 3-6207
Lithomaster Co. . . . . TR 2-5717

East Rutherford, New Jersey
Wm. C. Herrick Ink Co., Inc. . . GE 8-7172

Hartford, Connecticut
Merit Printers Supply . . . . . JA 5-0546

Houston, Texas
Lew Wenzel & Co. . . . . CA 6060

Indianapolis, Indiana
Automatic Saw Sharpening Co. . ME 7-2737
Davidson Sales . . . . . .
H. Lieber Co. . . . . .

Jacksonville, Florida
H. H. Furginson Printers Supply . 2-4052

Kalamazoo, Michigan
Newhouse Printers Supply . . . 2-6031

Kansas City, Missouri
Roberts & Porter, Inc. . . . . BA 1788
Interchemical Corporation
Printing Ink Division . . . . . VI 2707
Lawrence Litho Supply Co., Inc. . BA 6666

Lansing, Michigan
Ash Litho Supply Co. . . . . IV 4-9122

Los Angeles, California
Roberts & Porter, Inc. . . . . NO 3-3505
The California Ink Co., Inc. . . . AN 3-7331
Smart Supply Co., Inc. . . . . MI 9591
The Steward Co. . . . . DU 2-8287

Miami, Florida
General Equipment & Supply Co. . 9-0321

Milwaukee, Wisconsin
Sam'l Bingham's Son Mfg. Co. . HI 4-0329
Sangwin Bros. Ink Co.
Div. Gaetjens, Berger & Wirth, Inc. BR 2-1454
Eastman Kodak Stores, Inc. . . . BR 1-1478

HARRIS "COPPER BASE" and "COPPER-BASE ETCH"

Make better copperized aluminum deep-etch plates for higher-quality reproduction

Apply Copper-Base Etch, using a deep-etch swab. This assures excellent copperizing. Only Harris *Copper-Base Etch* eliminates stains and insoluble deposits on the plates.

Then Use Copper Base to chemically deposit a uniform layer of copper on image areas. You'll get higher-quality reproduction plus longer runs with Harris chemicals.

Here are two brand-new Harris chemicals for making copperized aluminum deep-etch plates: *Copper-Base Etch* is a patented solution that makes image areas highly receptive to copperizing . . . tends to eliminate stains and insoluble deposits on the plates. *Copper Base* chemically deposits a uniform layer of copper on the image areas.

1. Follow the regular process for making deep-etch plates, up to the step where you apply the etching solution. Then use Harris *Copper-Base Etch.* Cover the plate completely, allowing the etch to work for about 1 minute. Next, squeegee off the excess and wash plate thoroughly with Harris anhydrous alcohol. Make sure plate is free of all developer and etch. Fan it dry.

2. Next apply Harris *Copper Base.* Pour a pool of Copper Base in the center of the plate and distribute over entire plate with a clean plush-covered swab. Add fresh solution to the plate as the copper is deposited on the image areas. About 3 or 4 applications, total time 3 to 5 minutes, should give the ideal copper base. When the plating is completed, flush off excess Copper Base with anhydrous alcohol. Wash thoroughly with anhydrous alcohol. Fan dry.

Call your nearest Harris Chemical Dealer for these new chemicals. Harris-Seybold Company, Chemical Division, 5308 Blanche Avenue, Cleveland 27, Ohio.

HARRIS SEYBOLD COMPANY

HARRIS CHEMICAL DIVISION

Press Chemicals • Pre-sensitized Photo-Offset Plates
Surface Plate Chemicals • Deep Etch Chemicals
Allied Products

Minneapolis, Minnesota
Davidson Sales & Service . . . . .
Litho Supply Depot . . . . . FI 5151
Automatic Prtg. Equip. Co. . . . BR 8373

Montreal, Quebec
Harris-Seybold Canada, Ltd. . . . UN 6-8836

Nashville, Tennessee
Southeastern Printing Ink . . . 4-3332
Interchemical Corporation
Printing Ink Division 42-6381

New Orleans, Louisiana
Printers' Supply Mart . . . . . RA 9241

New York, New York
Harold M. Pitman Co. . . . . .
Roberts & Porter, Inc. . . . . WA 4-3756
Eastern Graphic Arts Supply
Co., Inc. . . . . BR 9-8480
Bridgeport Engr. Supply . . . . LO 3-6852
Eastman Kodak Stores, Inc. . . .
General Graphic Arts . . . . . MU 5-5245
Interchemical Corp.
Printing Ink Division . . . . . WH 3-8830
Alfred E. Metzger . . . . . OR 7-9559
J. H. & G. B. Siebold, Inc. . . . . OR 5-7650
Lithographers Supply Co. . . . . OR 5-7320

Magnet Litho Supply Corp. . . . CA 6-4385
Graphic Supply Co. . . . . SP 7-0130
William Recht Co., Inc. . . . . CO 7-8395
National Steel & Copper Plate Co. . CI 5-8822
Zimmer Printers Supply, Inc. . . BE 3-4429

North Bergen, New Jersey
Harold M. Pitman Co. . . . . UN 5-8300

Oklahoma City, Oklahoma
Bewal, Inc. . . . . RE 6-0305

Omaha, Nebraska
Omaha Photographic Laboratories AT 8946

Orlando, Florida
H. H. Furginson Printers Supply . OR 2-4052

Philadelphia, Pennsylvania
Roberts & Porter, Inc. 7-4460
Eastman Kodak Stores, Inc. . . . WA 3-1200
Interchemical Corporation
Printing Ink Division . . . . . MA 2-2427
Phillips & Jacobs . . . . . WA 2-3655
R. W. Rexford Co. . . . . LO 4-1120

Pittsburgh, Pennsylvania
Phillips & Jacobs . . . . . AT 1-0833
C. B. Collins . . . . . EM 1-8600

Phoenix, Arizona
The California Ink Co., Inc. . . . AL 4-4691

Portland, Oregon
The California Ink Co., Inc. . . . AT 6371
Eastman Kodak Stores, Inc. . . . CA 1863

Richmond, Virginia
E. H. Walker Co. 3-4107

Rochester, New York
Marks & Fuller . . . . . HA 2600

St. Louis, Missouri
Gaetjens, Berger & Wirth, Inc. . . JE 5-6825
Renda Litho Supply Co. . . . . JE 3-9221
Rissmann Graphic Arts Supply Co. PR 3-5303
Eastman Kodak Stores, Inc. . . . CE 1-9770

Salt Lake City, Utah
The California Ink Co., Inc. . . . 5-4694

San Francisco, California
Roberts & Porter, Inc. . . . . UN 3-5194
The California Ink Co., Inc. . . . EX 2-4688

Seattle, Washington
The California Ink Co., Inc. . . . MA 3215
Eastman Kodak Stores, Inc. . . . MA 9072

Spokane, Wash.
The California Ink Co., Inc. . . . MA 9945

Toledo, Ohio
Toledo Lithograin & Plate Co. . . CH 8-6478
Jones Graphic . . . . . FU 6661

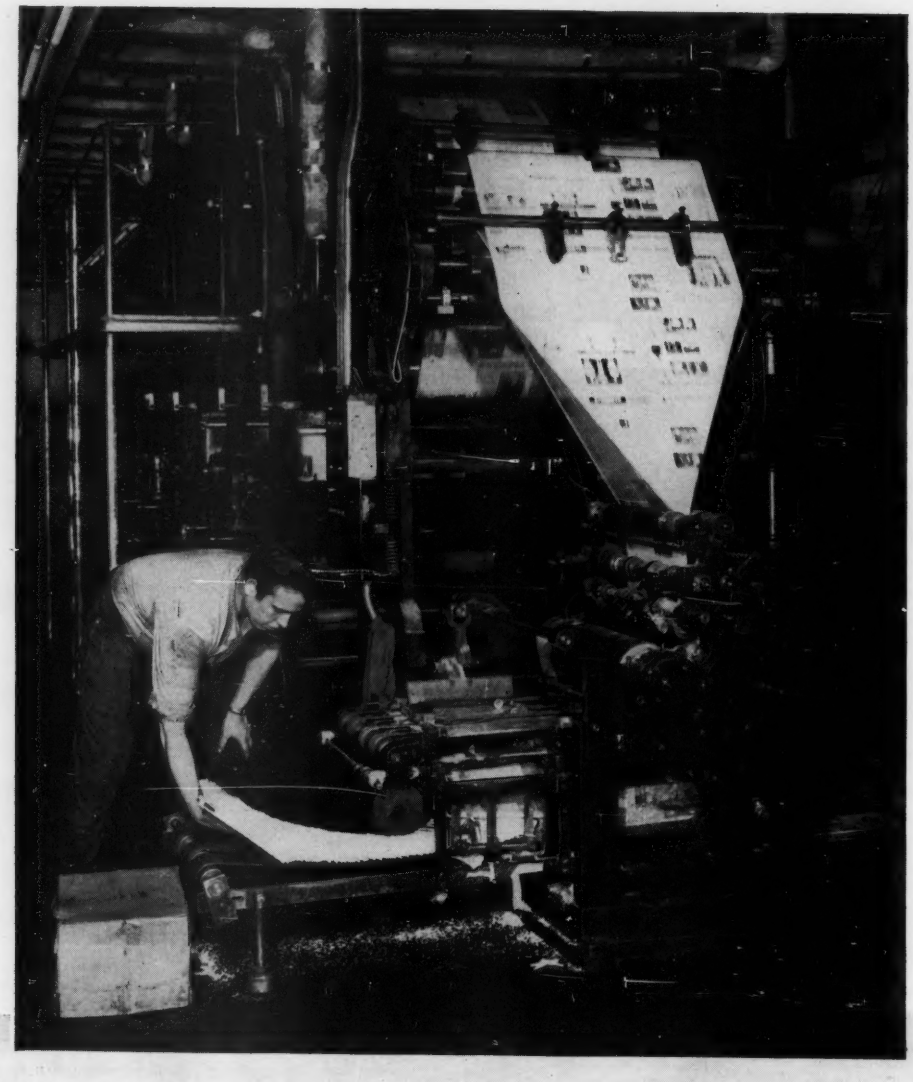
Toronto, Ontario
Harris-Seybold Canada, Ltd. . . EM 3-6153

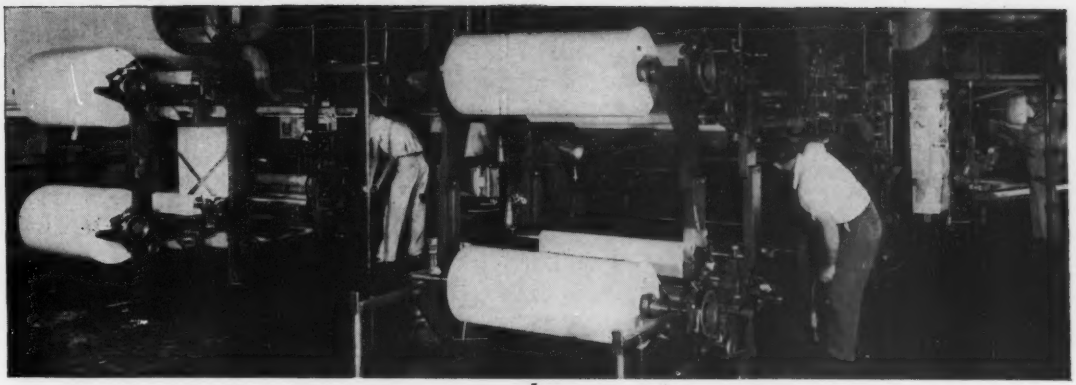
Tulsa, Oklahoma
Lew Wenzel & Co. 54-4269

Washington, D. C.
Capitol Printing Ink Co., Inc. . . DE 2-3883
Interchemical Corporation
Printing Ink Division . . . . . DE 2-9474
George R. Keller, Inc.. . . . . LA 6-7761
E. H. Walker Company . . . . DU 8068-69
Eastman Kodak Stores, Inc. . . .

Wichita, Kansas
Bewal, Inc. . . . . HO 4-1085

here's how you can take a page from this publication printer's book





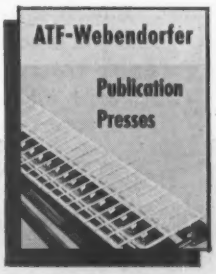
Today, many printers are turning to web-fed offset as an efficient, flexible and highly profitable method of doing publication work. For example, consider Haynes Lithograph Co., Silver Spring, Md., currently printing some 30 monthly and bi-monthly magazines.

Haynes was one of the first to see, and profit by, the tremendous possibilities offered by specializing in web-fed offset publication printing. Shortly after World War II, they bought their first web-fed press—a small ATF-Webendorfer. This soon became too limited for their growing business and was replaced by a larger ATF unit. A third ATF web-fed press was subsequently added to meet their still growing needs. Now, in the enviable position of having to turn down prospective business, they recently ordered their fourth ATF-Webendorfer press with a capacity of roughly twice the combined output of the present presses.

Among the advantages Mr. Roland Haynes cites for offset operation is lower plate costs than for letterpress, especially for publications with many illustrations. 120 line halftones are produced with excellent results, even on newsprint. Makeready and running time is shorter.

Other printers are finding that other types of work can more quickly and profitably be turned out on ATF-Webendorfer presses. Newspapers, sales manuals, advertising specialties, shopping guides, books and folders are only a few of the many current applications of fast, web-fed offset. These high-speed presses, equipped with their own folding and binding equipment, often produce a finished job at less than the cost of separate binding alone.

Why not look into ATF-Webendorfer presses and the opportunities they offer? For a free booklet detailing the operating features and specifications of presses in this great line, contact your ATF Sales Representative or write directly to American Type Founders, 200 Elmora Avenue, Elizabeth, N. J.



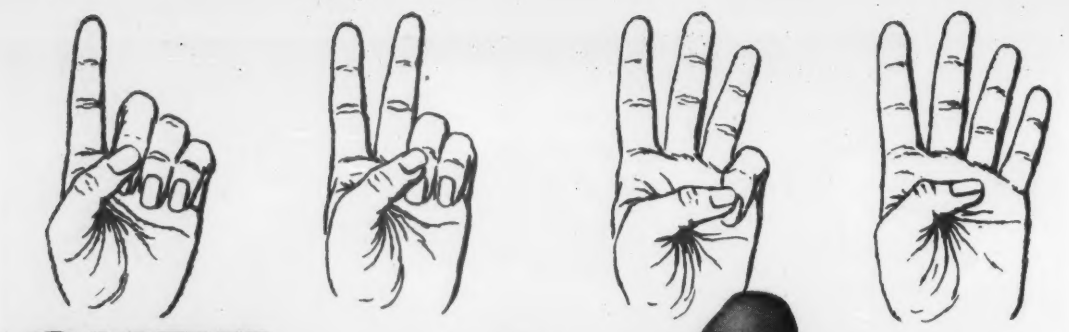
ATF

AMERICAN TYPE FOUNDERS

200 ELMORA AVENUE, ELIZABETH, N. J.

Better, more profitable printing from the widest line of equipment

3496



OVER 5 MILLION YARDS OF AQUATEX DAMPABASE

PATENTED ®

YES, OVER FIVE MILLION YARDS OF AQUATEX DAMPENING-ROLLER COVERING USED SO FAR

This great sales record of Aquatex and Dampabase to discerning lithographers throughout the world is vivid proof of their superb quality. There is no substitute for quality, and Aquatex and Dampabase are the very highest-quality dampening-roller coverings you can buy.

Buy Aquatex and Dampabase just once, and you'll never use any other dampening-roller covering. Remember—Dampabase, resilient and moisture-retaining, for the undercover; fuzz-free, smooth-moistening Aquatex on the surface of the roller.

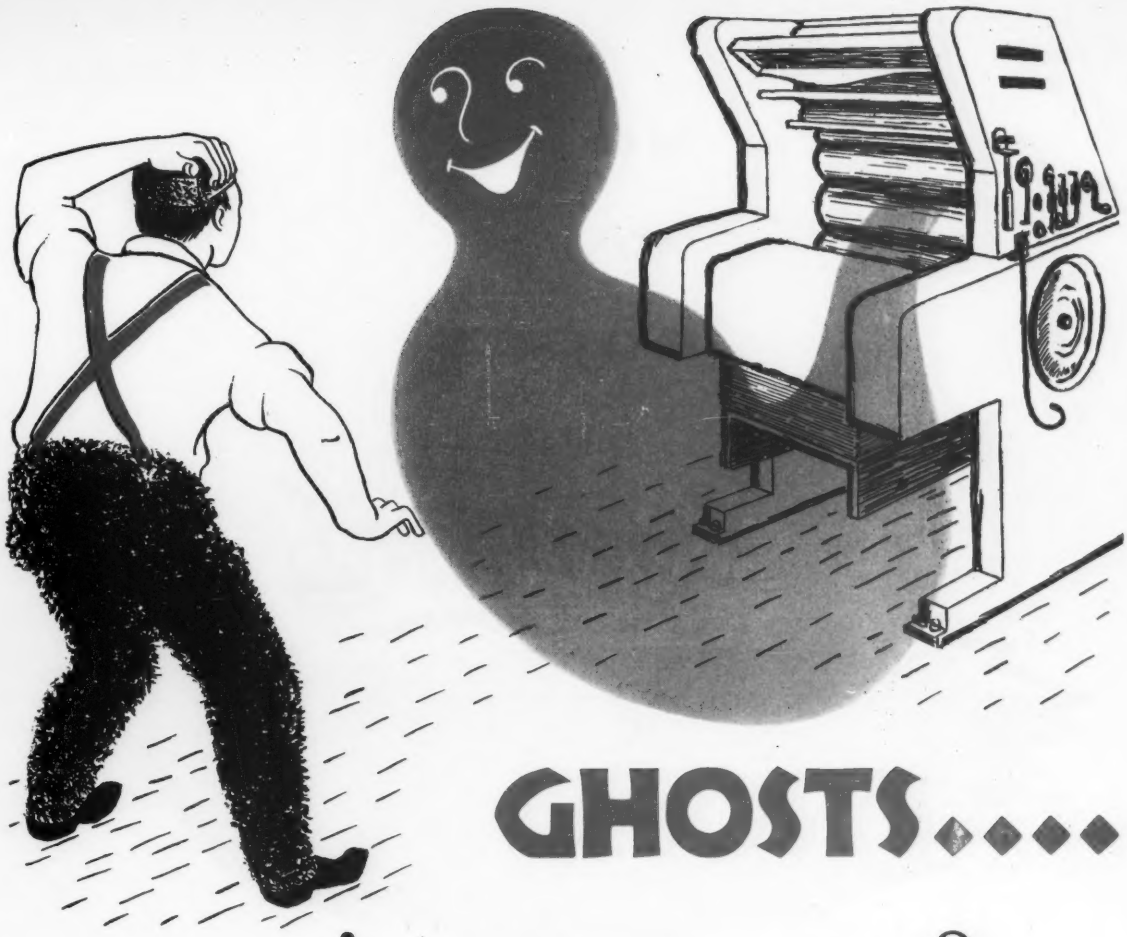
AND NOW—both Aquatex and Dampabase are available in pre-cut lengths with grommet or drawstring closure to eliminate your measuring, cutting, hemming, fumbling. This development saves you not only material but valuable press time. Specify the lengths and diameters of your dampening rollers, and Aquatex and Dampabase are delivered *pre-cut* for quick, easy installation.

THERE'S A SIZE OF AQUATEX-DAMPABASE FOR EVERY PRESS

GODFREY ROLLER COMPANY

Roller Makers for 91 Years

211-221 NORTH CAMAC STREET PHILADELPHIA 7, PA.



GHOSTS.....

.....*in your press?*

Pressmen who know, credit Imperial Fountain Solution with the ability to keep those ghostly tints from ruining fine offset reproduction. Imperial eliminates the pH problem . . . desensitizes non-printing plate areas without harming the image; keeps the water roller free of scum. Always uniform in quality, Imperial is a most economical solution to use . . . one gallon of concentrate makes up to 256 gallons of solution, just add water and gum. Try Imperial today . . . you'll find it has no equal for use on either aluminum or zinc.

PRICES

1 gallon	$7.00
12 gallons (per gal.)	$6.30
1 quart	$2.00

(Prices slightly higher on West Coast)

LITHO CHEMICAL & SUPPLY CO., Inc.
46 HARRIET PLACE
LYNBROOK, L.I. NEW YORK

LITH-KEM-KO PRECISION STANDARD OF THE WORLD UNIFORMITY

Send for a LITH-KEM-KO Catalog. It contains complete information on all our products plus instructions for making offset plates.

NO WAVY EDGES

Flat as proverbial "pancakes"...
Fox River cotton papers feed smoothly into the presses—handle easily in the bindery. You, and your customers, will like their crisp, fresh appearance, too!

Fox River cotton papers

Appleton, Wisconsin

Here's a famous graphic arts film that offers high speed for important time savings in both printing frames and in the camera.

In addition, it gives you many other outstanding characteristics which assure the very finest results in your plant.

FULL ORTHOCHROMATIC SENSITIVITY . . . permitting the use of filters to improve copy rendition, thereby reducing the need for hand-work on negatives.

STEEP GRADATION . . . FINE DOT ETCHING QUALITIES . . . CLARITY IN WHITE AREAS . . . WIDE DEVELOPING LATITUDE . . HIGH RESOLVING POWER.

P.S. *Make a good thing even better by developing in Ansco Reprodol.* Maximum density and high contrast, with developing time of 2-3 minutes in fresh solution. Laboratory packaged for your convenience. Available in 2, 10 and 25 gallon units.

Ansco

Binghamton, New York.

A Division of General Aniline & Film Corp. *"From Research to Reality."*

SINVALCO Chemicals

Produced in keeping with **S&V's** constant aim of supplying the finest in graphic arts' products, **SINVALCO** Chemicals offer lithographers the best in standardized, high-quality chemicals. Using a rigid system of quality control over raw materials and uniformity of finished product, **S&V** manufactures **SINVALCO** Chemicals from time-tested formulas to assure you of top efficiency and superior results.

Each ready-to-use **SINVALCO** Chemical is extremely effective for its particular application, saves valuable plate room time and improves the quality of your litho plates at a lower cost per plate.

Your nearest **S&V** representative will be glad to furnish you with more detailed information about the chemicals listed below. Call him today.

S&V

- SINVALCO **Deep Etch Coating Solution**
- SINVALCO **Deep Etch Developer**
- SINVALCO **Asphaltum**
- SINVALCO **Stabilized Albumin Solution**
- SINVALCO **Plate Etches for Zinc & Aluminum**
- SINVALCO **Fountain Etch for Zinc & Aluminum**
- SINVALCO **Stabilized Gum Solution**
- SINVALCO **Deep Etch Lacquer**
- SINVALCO **Surface Plate Lacquer**
- SINVALCO **Deep Etching Solution for Zinc**
- SINVALCO **Deep Etching Solution for Aluminum**
- SINVALCO **Developing Inks**
- SINVALCO **Synthetic Surface Coating**
- SINVALCO **Non-Toxic Fountain Solution**
- SINVALCO **Chrome Etching Solution**
- SINVALCO **Copperizing Solution for Plates & Rollers**

THE LITHO CHEMICAL DIVISION OF

Sinclair and Valentine Co.

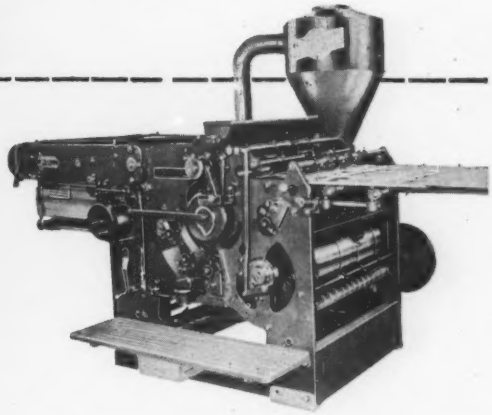
Main office & factory: 611 West 129th St., New York 27, N. Y.

OVER 35 BRANCHES PROVIDE SERVICE FROM COAST TO COAST

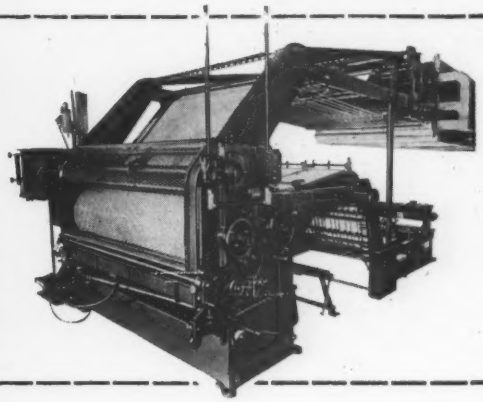
Christensen Profitmakers!

Machinery, built to do more jobs . . . better!

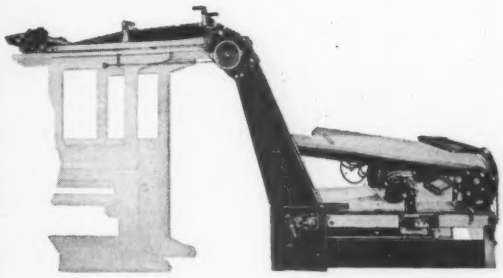
BRONZING Equipment will bring new jobs into your shop . . . and a Christensen High-Speed Bronzer attached to your press will mean increased profit with low operating costs. Matches the practical running speed of your press . . . exhauster-reclaimer keeps bronze out of the press-room and in the machine.



VARNISHING of labels, magazine covers, circulars and gift wrappings enhances both product appearance and profits. The Christensen Varnishing Machine operates at almost twice the speed of any other present varnisher. Dual-level oven decreases floor space required. The Christensen will handle paper or board in widths up to 78 inches.



STREAM FEEDING with the Christensen Continuous Feeder means no stopping of the press . . . more printed sheets per hour. Improved register because sheets arrive at register position at one-sixth the speed of sheet-by-sheet feeders. Floor loading reduces operator fatigue, reduces loading time, eliminates stairs and platforms.



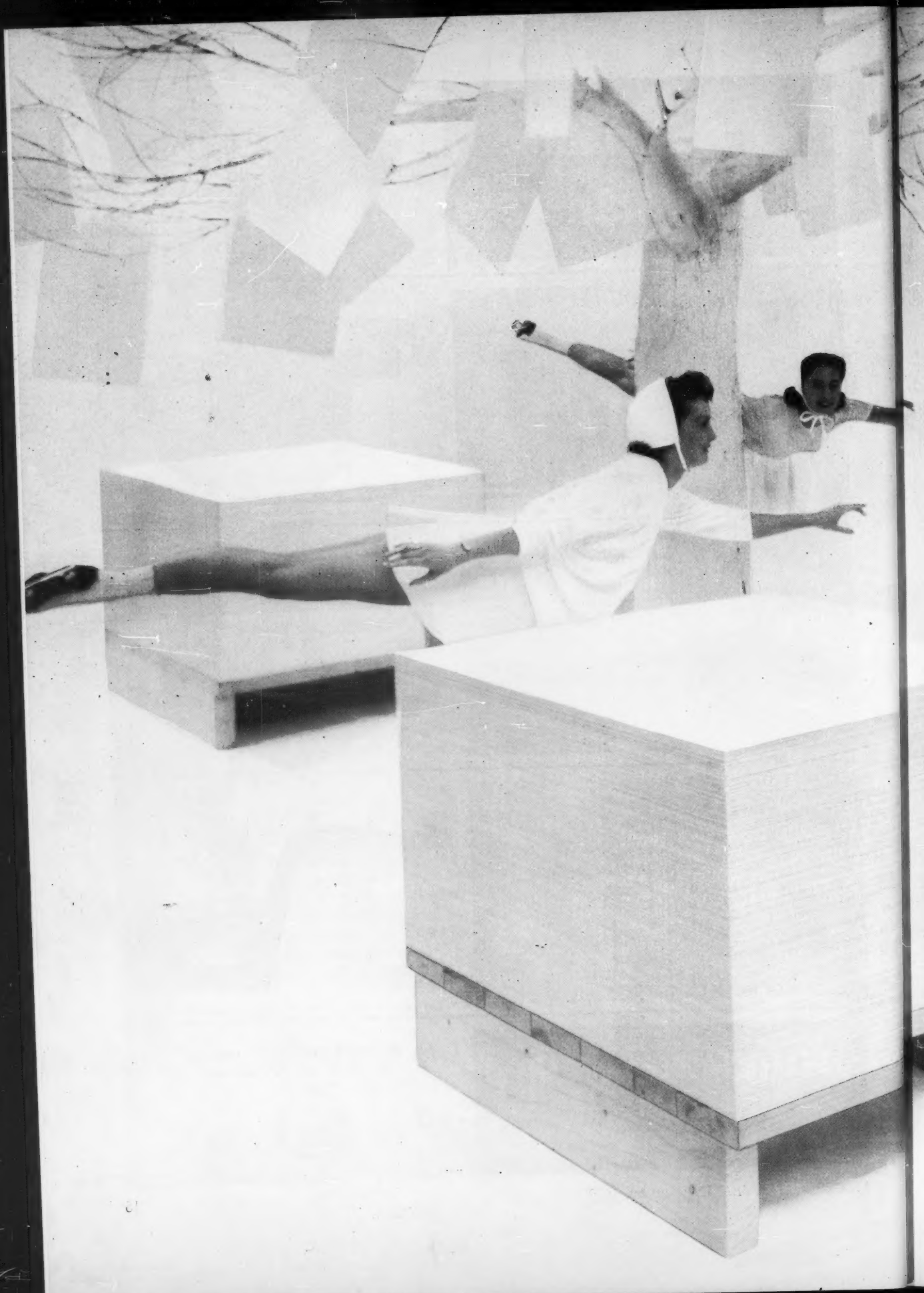
DEXTER FOLDER COMPANY

General Sales Office

330 West 42nd Street New York 36, N. Y.

ILLUSTRATED CIRCULARS ARE AVAILABLE FOR ANY OF THE ABOVE MACHINES

DEXTER



ACCENT ON BALANCE...

In a nutshell, the right balance of qualities in printing paper can mean good all-around performance. And with today's tough production schedules, dependable performance in both the press *and* bindery is becoming increasingly important.

You'll find balanced properties in all of Kimberly-Clark's Modern Coated Papers. Each is "engineered" to do the best possible job at its grade level. And there's one of these fine papers for almost every coated paper requirement.

If you're a modern, progressive printer who wants a modern printing paper that gives you both maximum printability and maximum runability, it will pay you to look to Kimberly-Clark. We're as close to you as your nearest distributor.

• • •

for Modern Lithography . . . Prentice Offset Enamel Lithofect Offset Enamel • Shorewood Coated Offset Fontana Dull Coated Offset.

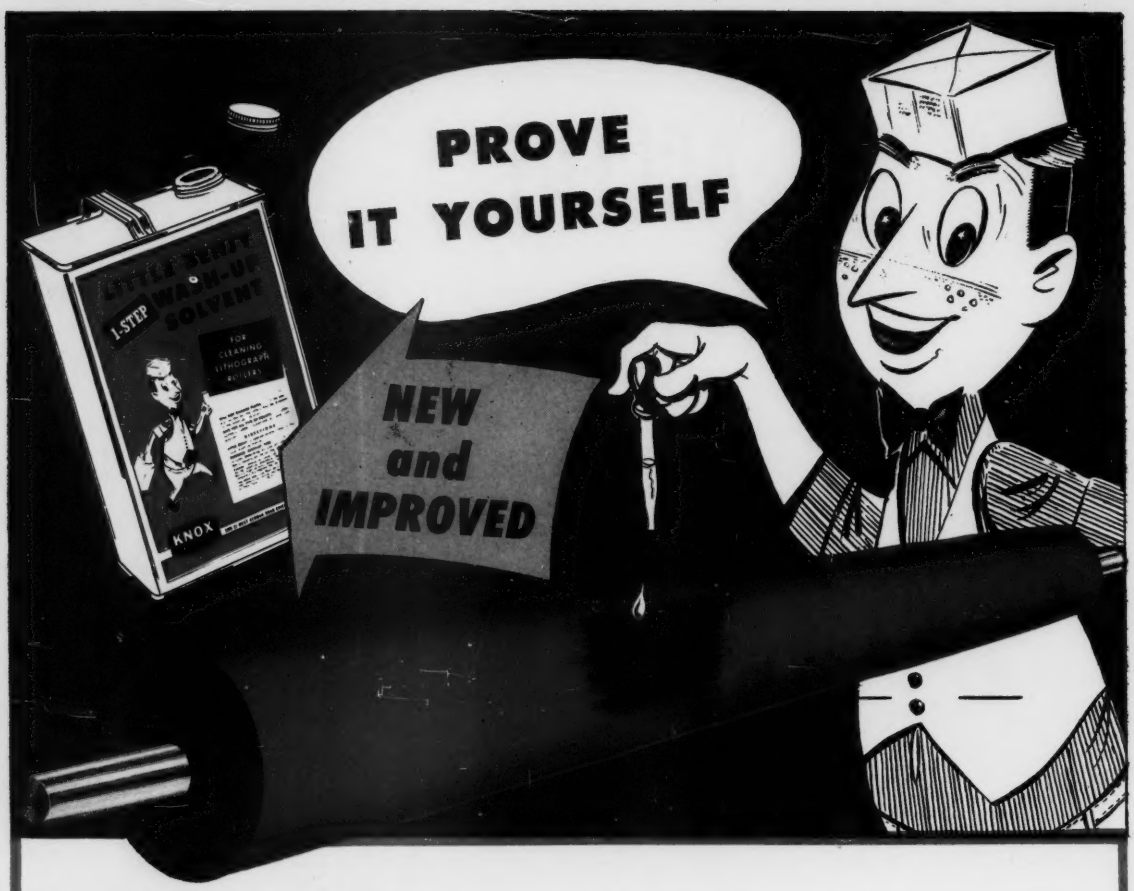
for Modern Letterpress . . . Hifect Enamel • Crandon Enamel • Trufect Coated Book • Multifect Coated Book.

Kimberly-Clark

COATED PRINTING PAPERS

Kimberly-Clark Corporation • Neenah, Wisconsin

DETROIT PUBLIC LIBRARY



LITTLE BENJY 1 Step Wash-up Solvent

CLEANS ROLLERS FASTER, SAFER, BETTER THAN ANY OTHER METHOD

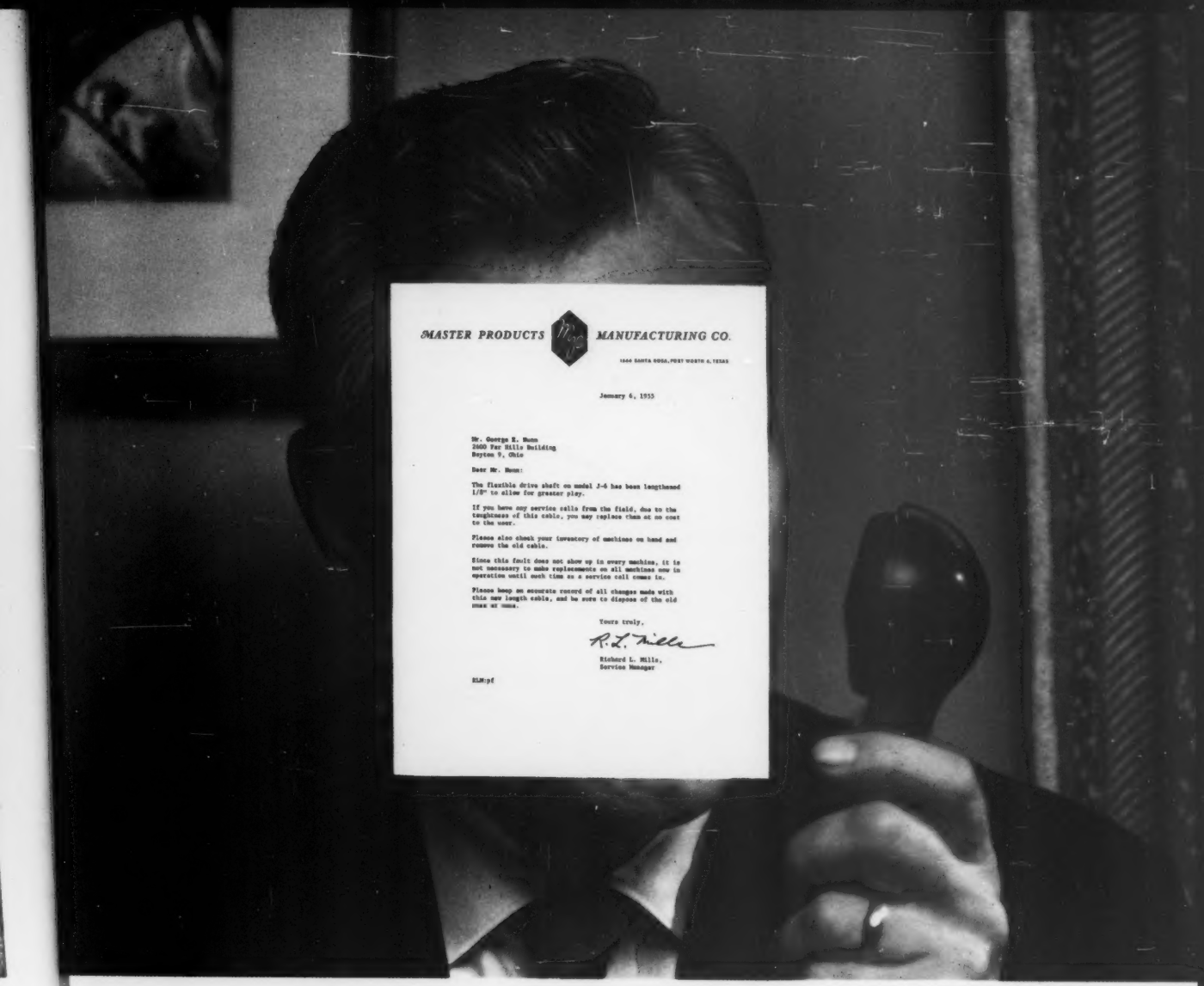
Try this. A few drops of Little Benjy on a small area of a badly scaled and dirty roller. In just fifteen seconds, wipe away all pigments, glaze, and gum left deep in the roller by ordinary solvents. See how effective Little Benjy can be in removing the toughest scale deposits.

See the results obtained in repeated field tests: reflex blue to pastel yellow in fifteen minutes, under typical pressroom conditions!

We'll supply the dropper, sample can of Little Benjy, and brochure showing actual test results. Don't delay . . . write today.

KNOX
SOAP COMPANY

3300-22 WEST CERMAK ROAD-CHICAGO 23, ILLINOIS, U.S.A.


MASTER PRODUCTS MANUFACTURING CO.
1046 SANTA ROSA, FORT WORTH 4, TEXAS
January 6, 1955
Mr. George E. Hunn
2600 Par Hills Building
Dayton 9, Ohio
Dear Mr. Hunn:
The flexible drive shaft on model J-6 has been lengthened 1/8" to allow for greater play.
If you have any service calls from the field, due to the toughness of this cable, you may replace them at no cost to the user.
Please also check your inventory of machines on hand and remove the old cable.
Since this fault does not show up in every machine, it is not necessary to make replacements on all machines now in operation until each time as a service call comes in.
Please keep an accurate record of all changes made with this new length cable, and be sure to dispose of the old ones at once.
Yours truly,
R. L. Mills
Richard L. Mills,
Service Manager
RLM:pf

COLOR PHOTOGRAPH BY ANTON BRUEHL

How do you look to customers you've never seen?

YOU PUT YOURSELF *and* your company on paper when you talk to people by mail. You're a letterhead—a typed message—a signature.

But you come to life again when you've been read. You become a picture in another man's mind. How do you look?

Well, how do your letters look? Does your letterhead make typewritten messages stand out crisply and cleanly to demand attention? Does it have that fine paper crackle and feel when it's in your customer's hands? Are you proud to put your signature on it?

That's the way it should be for good impressions. That's the way it *is* when your letterhead is on HOWARD BOND.

Ask your printer or paper merchant to show you samples of *whitest* white and colors.

You'll look your best when you're on HOWARD BOND.

PRINTERS! *This message appears in advertising magazines read by your customers.*

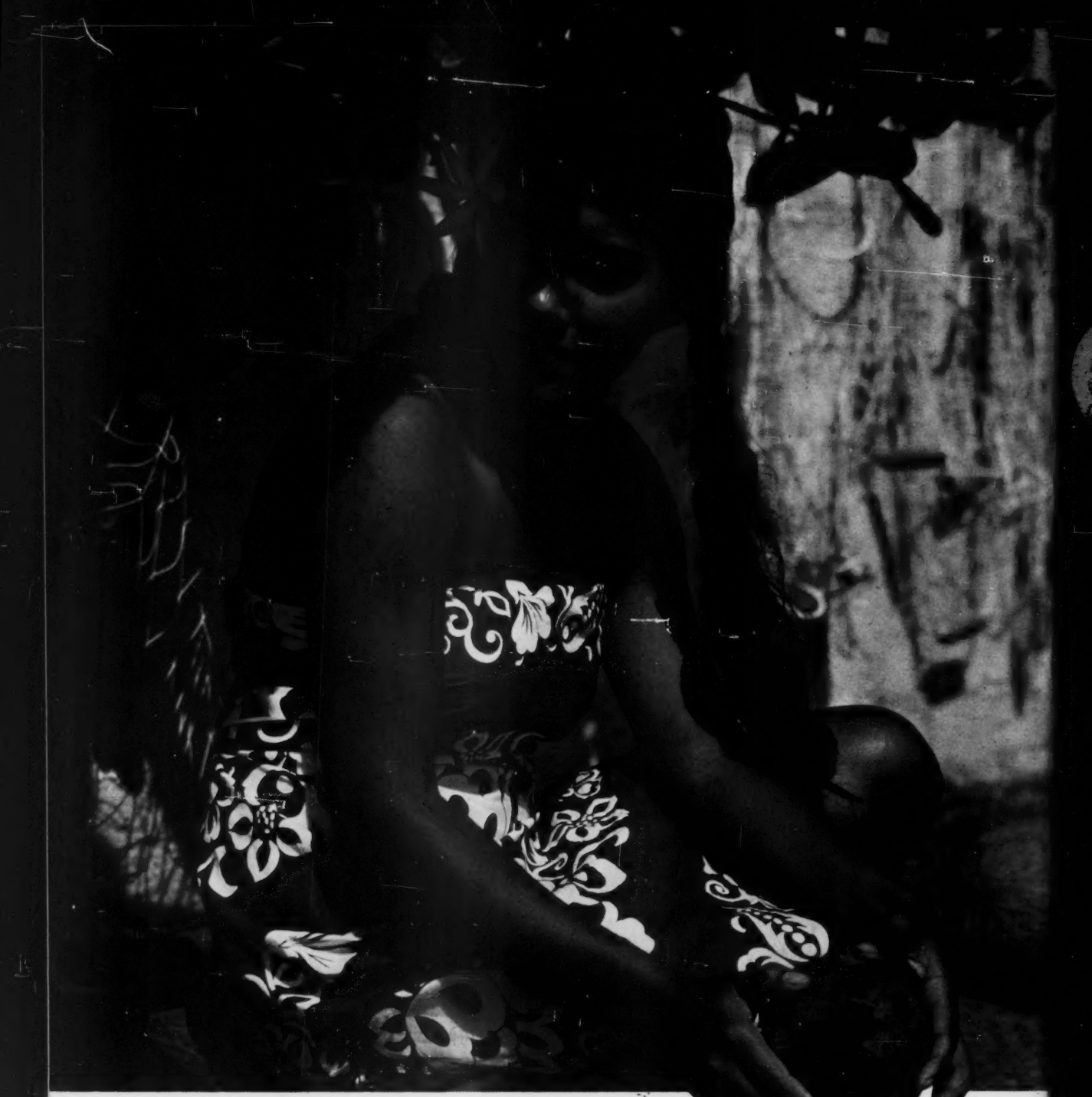
HOWARD PAPER MILLS, INC. • HOWARD PAPER COMPANY DIVISION, URBANA, OHIO

Howard Bond

"The Nation's Business Paper"

Companion Lines: **Howard Ledger • Howard Mimeograph Howard Writing • Howard Posting Ledger**

Printed on Maxwell Offset *Basis 80—Hand Made Style finish*



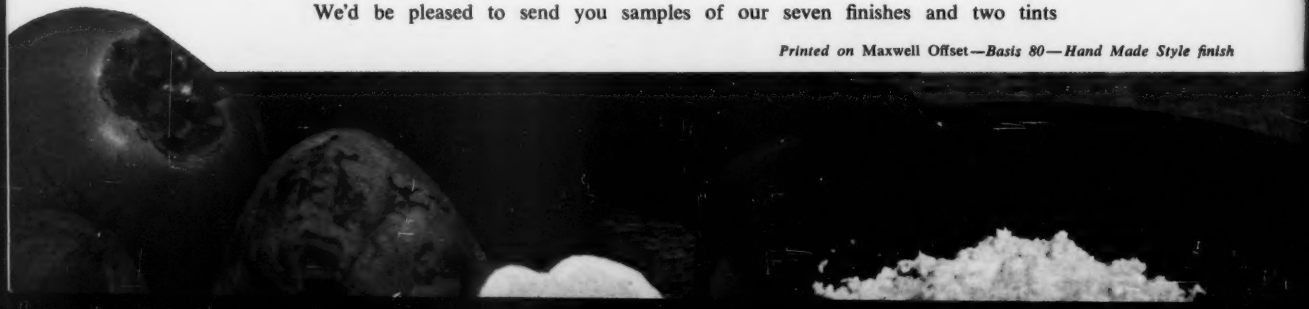
COLOR PHOTOGRAPH BY ANTON BRUEHL

Doesn't color reproduce better on Maxwell Offset?

Howard Paper Mills, Inc. / MAXWELL PAPER COMPANY DIVISION / Franklin, Ohio

We'd be pleased to send you samples of our seven finishes and two tints

Printed on Maxwell Offset—*Basis 80—Hand Made Style finish*



FORGET OXIDATION

...the chief cause of plate troubles!

Try RRL plate veneer and RRL plate sensitizer for a real eye-opener on reproduction quality *at no cost to you.*

Two RRL developments open a whole new world of reproduction quality to offset plate-makers. No more worry about *humidity*. No more worry about *oxidation*. No more gumming plates during press stoppages. No more worry about plate spoilage due to oxidation.

RRL PLATE VENEER* AND RRL PLATE SENSITIZER* OFFER YOUR SHOP AN INFALLIBLE, EASY METHOD TO PREVENT OXIDATION OF *ZINC, ALUMINUM DEEP ETCH OR SURFACE PLATES*. 100% RESULTS EVERY TIME!

Prove these facts for yourself, in your own shop at your leisure. You'll find the performance of these RRL products unprecedented by anything you have used or anything on the market today. *Plus* highly concentrated formulation and non-deteriorating shelf life bring welcome economies!

RRL PLATE VENEER		RRL PLATE SENSITIZER	
1 gallon, per gallon unit	3.50	1 gallon, per gallon	6.50
4 gallons, per gallon unit	3.35	4 gallons, per gallon	6.25
12 gallons, per gallon unit	3.28	12 gallons, per gallon	6.00
24 gallons, per gallon unit	3.00		

Prices slightly higher in Canada and Pacific states.

WE'LL SEND GENEROUS SAMPLES FREE AND WITHOUT OBLIGATION, WITH DIRECTIONS FOR USE. *Fill out and mail coupon now!*

*Patents Pending

REPRODUCTION RESEARCH LABORATORIES, INC.
16 LOWER LINCOLN AVENUE • OCEANSIDE, L. I., N. Y.

REPRODUCTION RESEARCH LABORATORIES, INC.
16 LOWER LINCOLN AVENUE, OCEANSIDE, L. I., NEW YORK

Gentlemen:

Send your samples of RRL Plate Veneer and RRL Plate Sensitizer with obligation to:

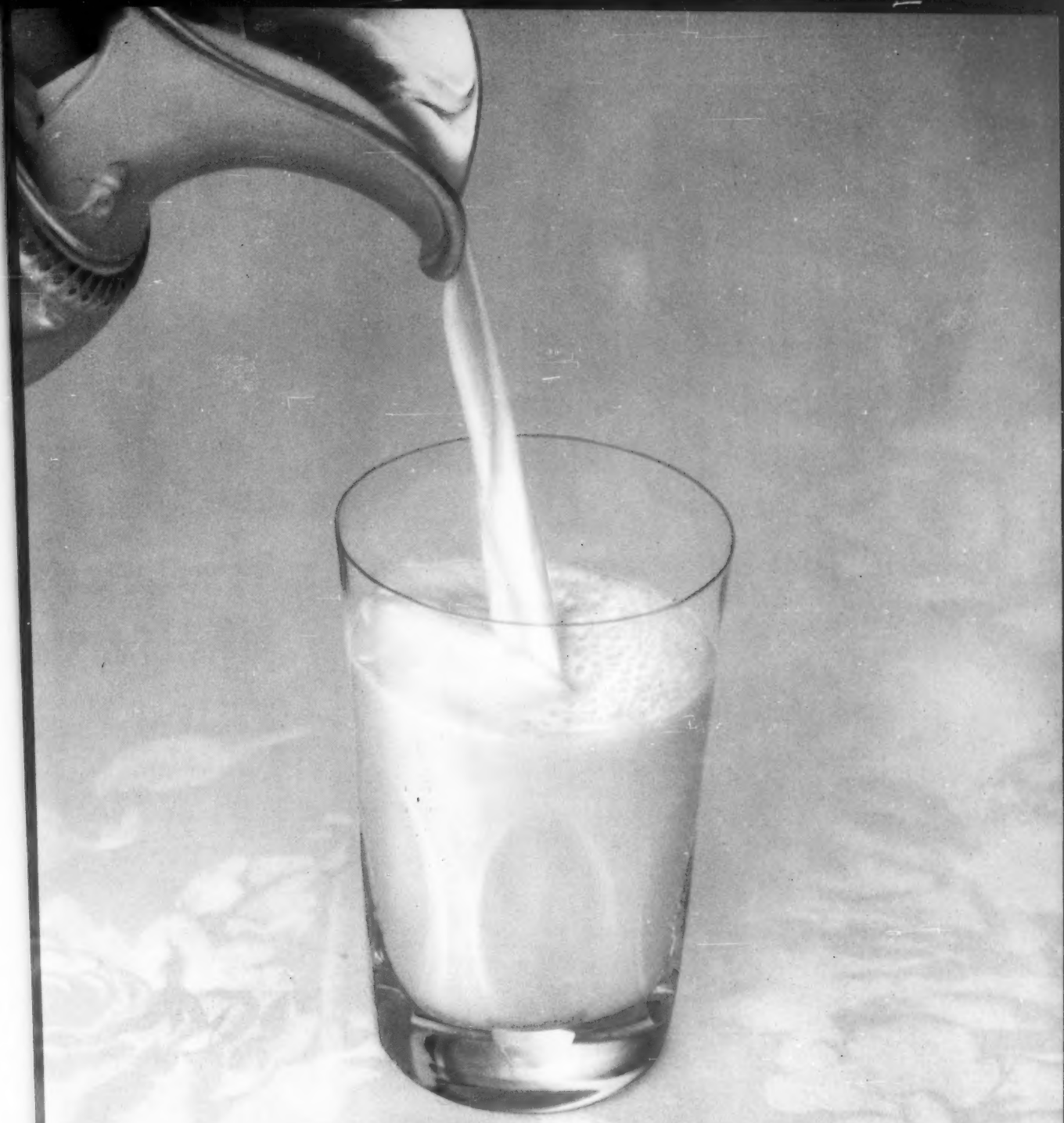
NAME_____ FIRM_____

ADDRESS_____

CITY_____ ZONE_____ STATE_____

These dealers can supply you

AKRON, OHIO, METZGER PHOTO SUPPLY CO.
ATLANTA, GA., SOUTHERN GRAPHIC ART SUPPLY CO.
BALTIMORE, MD., CAPITOL PRINTING INK CO., INC.
CHICAGO, ILL., NORMAN WILLETS GRAPHIC SUPPLY CO.
CLEVELAND, OHIO, CAPITOL PRINTING INK CO., INC.
DALLAS, TEXAS, OFFSET PLATE GRAINING CO.
HONOLULU, T.H., CALIFORNIA INK CO.
HOUSTON, TEXAS, HI-SPEED LITHO SUPPLY CO.
KANSAS CITY, MO., LAWRENCE GRAPHIC SUPPLY CO.
LOS ANGELES, CALIF., CALIFORNIA INK CO.
MIAMI, FLA., MIAMI LITHO SUPPLY CO.
MINNEAPOLIS, MINN., T. A. GRAY, INC.
NASHVILLE, TENN., SOUTHERN PRINTING INK, INC.
PHOENIX, ARIZ., CALIFORNIA INK CO.
NEW YORK, N. Y., ALFRED E. METZGER
SALT LAKE CITY, UTAH, CALIFORNIA INK CO.
SAN FRANCISCO, CALIF., CALIFORNIA INK CO.
SEATTLE, WASH., CALIFORNIA INK CO.
TULSA, OKLA., BRITTCO SUPPLY CO.
PHILADELPHIA, PA., PHILLIPS & JACOBS, INC.
PITTSBURGH, PA., PHILLIPS & JACOBS, INC.
ST. LOUIS, MO., RISSMAN GRAPHIC ARTS SUPPLY CO.
WASHINGTON, D. C., CAPITOL PRINTING INK CO., INC.



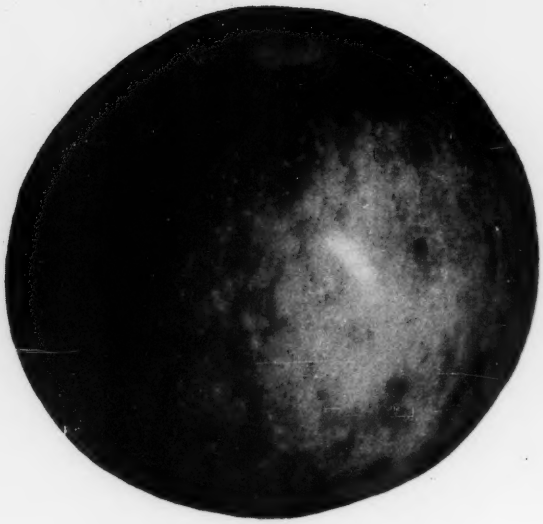
CLEAN AS THE NEW HAMMERMILL BOND. It isn't often that you will see a speck of dirt in Hammermill paper nowadays. Every bit of pulp that goes into any Hammermill paper gets a final cleaning through centrifugal equipment that whirls any impurities out of the pulp—equipment that Hammermill spent a half million dollars to invent, develop and install. This extra step makes Hammermill Bond cleaner than ever. Another reason why it *prints* better, *types* better, *looks* better. Hammermill Paper Company, Erie, Pa.

—yet

HAMMERMILL BOND **costs no more**

—and actually less than many other watermarked papers

Delicious



Rome Beauty

with HAMMERMILL OFFSET
you can print the difference

When you print a red apple on Hammermill Offset it isn't just a red apple. It's a Rome Beauty, or a Delicious, or a York Imperial, or a Stayman. You can reproduce subtle differences in color faithfully, with striking realism, on new Hammermill Offset. It's brighter, blue-whiter. And it's cleaner than ever—the result of centrifugal cleaning equipment that took Hammermill a half million dollars to invent, develop and install.

Lithographed on Hammermill Offset, Substance 80, Wove finish
Manufactured by
HAMMERMILL PAPER COMPANY, ERIE, PENNSYLVANIA

York Imperial

Stayman

Presses stop and start again without removing ink or cleaning

Ink-O-Saver — Saves you valuable press time. It reduces the time required to prepare the press for shutdown to a minimum and keeps your presses rolling longer each day. You do not remove the ink from the fountain. Simply spray the entire surface of the ink in the fountain with a protective film of Ink-O-Saver. A fast, simple operation — it is done in a matter of minutes. You can then leave the press overnight (or up to 72 hours) with no drying or skinning of the ink in the fountain.

To start up again, simply mix the ink in the fountain; start the press; and you are off to a flying start with full speed production.

No more messy emptying and cleaning of the fountain to shut down, and no more time lost in refilling the fountain to start up again.

Ink-O-Saver — will also cut your ink bill. No more loss of ink from drying or skinning in the fountain, or in the can. With Ink-O-Saver every pound of ink will be good to the last drop! In the closed ink can, it will last indefinitely.

Ink-O-Saver — will not affect the color, viscosity, drying, or the quality of the ink on the printed sheet in any way.

Ink-O-Saver — more than pays for itself. One can gives you more than 300 applications. At a cost of less than 1c, each application saves you dollars in materials, labor and press time.

Send in the coupon for a trial can today. Ink-O-Saver *must* satisfy you or your money refunded in full.

NEW INK-O-SAVER STOPS INK SKINNING IN 2 SECONDS

- cuts lost production time for shutdowns to a minimum
- prevents skinning and waste of inks
- saves you money every day
- is safe and easy to use — non-toxic and non-inflammable

A Division of *Chemical Corporation*

Sun Supply Company

10th Street and 44th Avenue, Long Island City 1, N. Y.

DIVISIONS OF SUN CHEMICAL CORPORATION

SEND TODAY FOR TRIAL INK-O-SAVER BOMB, MONEY BACK GUARANTEE, OF COURSE!

Sun Supply Company
Dept. 1, 10th St. & 44th Ave.
Long Island City 1, N. Y.

We'd like to try Ink-O-Saver. Please rush one Bomb (over 300 applications) and bill our account $3.00.

Name_____ Title_____

Company_____

Address_____

City_____ State_____

HORN • HUDSON • WILLEY (paints, maintenance and construction materials, industrial coatings) • WARWICK (textile and industrial chemicals) • WARWICK WAX (refiners of specialty waxes) • RUTHERFORD (lithographic equipment) • SUN SUPPLY (lithographic supplies) • GENERAL PRINTING INK (Sigmund Ullman • Fuchs & Lang • Eagle • American • Kelly • Chemical Color & Supply Inks) • MORRILL (news inks) • and ELECTRO-TECHNICAL PRODUCTS (coatings and plastic

Quality Printing Begins with the Platemaker

Award-Winning Lithography Begins with Expert Craftsmen . . . and the Quality Materials With Which They Work

Leaders in the lithographic field know that every step is important in turning out a top-notch printing job, but, that *all quality printing must begin with the platemaker.*

Reproducing the original copy with absolute fidelity depends upon his expert touch. Every phase of the platemaking process must bear his conscientious attention.

Equally important, he must have quality materials with which to work. That's why leading lithographers, who insist *quality* is the *important* thing, specify 3M Brand Photo Offset Plates.

Consistent quality performance has made grainless, non-oxidizing 3M Brand the world's largest-selling pre-sensitized, all-aluminum offset plates. Have *you* tried them in *your* shop?

MAIL THIS COUPON TODAY

MINNESOTA MINING AND MANUFACTURING CO., DEPT. DY-16LT, ST. PAUL 6, MINN.

BEARER DIAMOND TEST STENCILS compliments of your 3M PLATE REPRESENTATIVE

3M BRAND Photo Offset Plates

FREE! Please send me, without cost or obligation, useful Bearer Test Stencils plus names of professional platemakers in my area who use 3M Plates.

PRODUCT OF 3M RESEARCH

We have_____ Presses. Position_____

Name_____ Company_____

Address_____ City_____ State_____

"3M" is a registered trademark of Minnesota Mining and Manufacturing Co., St. Paul 6, Minnesota. General Export: 99 Park Ave., New York 16, N. Y. In Canada: London, Ontario.

Published in the interest of Professional Lithographic Platemakers by the manufacturers of the ***World's Largest-Selling Pre-Sensitized All-Aluminum Photo Offset Plates***

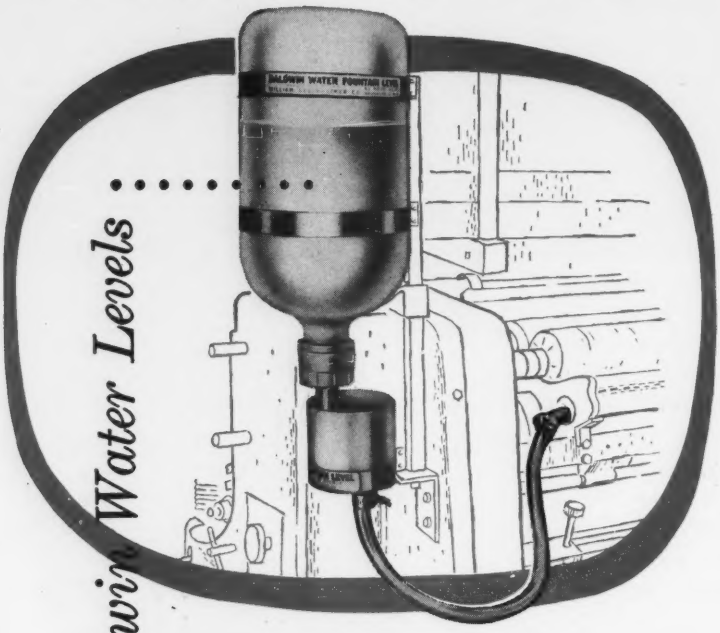
Here's why
ATLANTIC IS 1st IN SALES
of all genuinely
watermarked bonds
1st BECAUSE... Atlantic Bond is the only paper which shows the substance weight as part of its genuine watermark!
1st BECAUSE... Atlantic Bond is made better! It looks so much whiter, brighter. It snaps and crackles...feels so good to the touch!
1st BECAUSE... Atlantic Bond, "The Printers' Paper," assures you better impressions...sharper, clearer halftones...a constant affinity for ink!
1st BECAUSE... Atlantic Bond is moisture controlled for dimensional stability—which assures accurate register on every run!
Find out for yourself why Atlantic Bond is America's best selling genuinely watermarked #1 Sulphite! Ask your Atlantic Merchant for a free sample packet.
EASTERN
Atlantic
Manifest
EXCELLENCE IN FINE PAPERS
Atlantic Papers
ATLANTIC BOND
ATLANTIC OFFSET
ATLANTIC COVER
ATLANTIC LEDGER
MANIFEST BOND
Products of Eastern Corporation • Mills in Bangor and Lincoln, Maine

Coming Soon in Modern Lithography

A COMPREHENSIVE three-part series of articles on presensitized plates. The first article, to appear in an early issue of ML, will give results of a poll of lithographers in all parts of the country to determine how many are using presensitized plates, and with what results. Subsequent articles will give all the technical details on the various plates, size 14 x 20″ and larger, and predict the future for these plates.

THANK YOU, MR. LITHOGRAPHER

for your overwhelming endorsement!



In three short years, you have purchased—and then repurchased—more than 3,000 Baldwin Water Fountain Levels. You've shown you appreciate how Baldwins automatically keep fountain solution feed consistently correct and even—eliminate dry-ups and wet spots, and expensive rust-causing, sheet-spoiling slopovers. You like the resulting uniformity that gives color consistant sparkle, production a new smooth flow of top quality printing.

You've seen how they're sold on a thirty day free trial basis, how they pay for themselves in short order, and that there is a size for each press.

Thank you for your endorsement, and for the opportunity to solve your solution control problems. It's always a pleasure!

WILLIAM GEGENHEIMER CO., INC.

80 ROEBLING ST. BROOKLYN 11, N. Y.

MANUFACTURERS OF BALDWIN INK FOUNTAIN AGITATORS • BALDWIN VIBRATING ROLLERS
BALDWIN PRESS WASHERS • BALDWIN WATER STOPS • BALDWIN WATER FOUNTAIN LEVELS

Trade Events

PIA, Professional Conference for Presidents, Jan. 23-27, Boca Raton Hotel, Boca Raton, Fla.

Lithographic Technical Foundation, annual meeting, Feb. 7-8, Lotos Club, New York City.

National Packaging Exposition, 25th annual showing, April 9-12, Convention Hall, Atlantic City.

National Association of Litho Clubs, annual convention, April 20-21, Lord Baltimore Hotel, Baltimore, Md.

Technical Association of Graphic Arts, annual convention, May 7-9, Edgewater Beach Hotel, Chicago.

Research & Engineering Council, 6th annual meeting, May 9-11, Edgewater Beach Hotel, Chicago.

Lithographers National Association, 51st annual convention, May 10-12, Drake Hotel, Chicago.

International Graphic Arts Education Association, annual convention, Aug. 5-10, Santa Barbara, Calif.

National Association of Photo-Lithographers, 24th annual convention, Sept. 19-22, Commodore Hotel, New York City.

Printing Industry of America, annual convention, Oct. 30-Nov. 2, Statler Hotel, Los Angeles, Calif.

Litho Schools

CANADA—Ryerson Institute of Technology. School of Graphic Arts, 50 Gould St., Toronto, Ont., Canada.

CHICAGO—Chicago Lithographic Institute, Glessner House, 1800 S. Prairie Ave., Chicago 16, Ill.

CINCINNATI—Ohio Mechanics Institute. Cincinnati, Ohio.

LOS ANGELES—Los Angeles Trade Technical Junior College, 1646 S. Olive St., Los Angeles 15, Calif.

MINNEAPOLIS—Dunwoody Industrial Institute, 818 Wayzata Blvd., Minneapolis 3, Minn.

NASHVILLE—Southern School of Printing, 1514 South St., Nashville, Tenn.

NEW YORK—New York Trade School. Lithographic Department, 312 East 67 St., New York, N. Y.

OKLAHOMA—Oklahoma A & M Technical School. Graphic Arts Dept., Okmulgee, Okla.

ROCHESTER—Rochester Institute of Technology. Dept. of Publishing & Printing, 65 Plymouth Ave., South Rochester 8, N. Y.

PHILADELPHIA—Murrell Dobbins Vocational School. 22nd and Lehigh, Philadelphia,, Pa.

PITTSBURGH—Carnegie Institute of Technology. Dept. of Printing Administration, Pittsburgh.

SAN FRANCISCO—City College of San Francisco. Ocean and Phelan Aves., Graphic Arts Department.

ST. LOUIS—David Ranken, Jr., School of Mechanical Trades, 4431 Finney St., St. Louis 8, Mo.

VANCOUVER—Clark College.

WEST VIRGINIA—W. Va. Institute of Technology. Montgomery, W. Va.

Trade Directory

Lithographic Tech. Foundation
Wade E. Griswold, Exec. Dir.
131 East 39 St., New York 16, N. Y.

National Association of Photo-Lithographers
Walter E. Soderstorm, Exec. V. P.
317 West 45 St., New York 36, N. Y.

Lithographers National Association
W. Floyd Maxwell, Exec. Dir.
420 Lexington Ave., New York 17, N. Y.

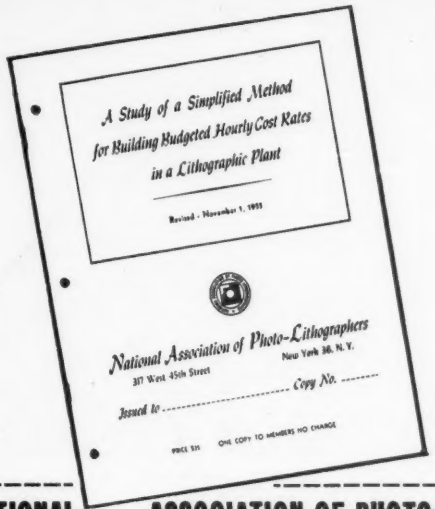
National Assn. of Litho Clubs
Frank H. Mortimer, Secy.
5917 33rd St., N. W.
Washington 15, D. C.

Printing Industry of America
James R. Brackett, Gen. Mgr.
719 15th St., N. W. Washington 5, D. C.

International Assn. of Printing House Craftsmen
P. E. Oldt, Exec. Sec'y.
307 E. Fourth St., Cincinnati 2.

SHOOTING IN THE DARK

at operating costs?


A Study of a Simplified Method
for Building Budgeted Hourly Cost Rates
in a Lithographic Plant
Revised - November 1, 1955
National Association of Photo-Lithographers
New York 36, N. Y.
317 West 45th Street
Issued to ..... Copy No. .....
PRICE $35 ONE COPY TO MEMBERS NO CHARGE

Then here's the way to get the specialized help you need. The National Association of Photo-Lithographers has prepared "A Study of a Simplified Method for Building Budgeted Hourly Cost Rates in a Lithographic Plant" as a service to its members. Non-members may purchase this study at $35.00 per copy.

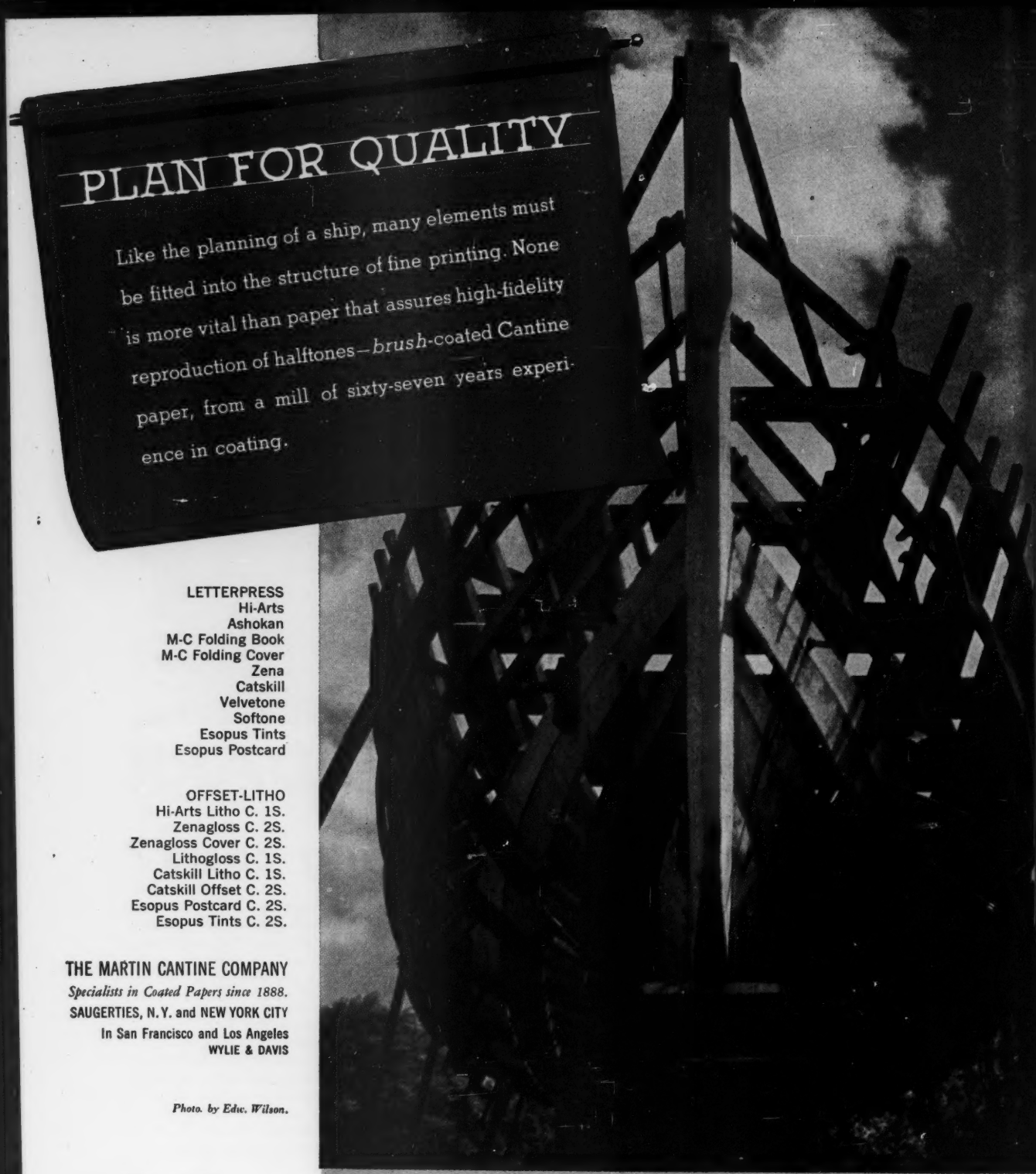
Prepared by Walter E. Soderstrom, Executive Vice-President, and Frank R. Turner, Jr., Cost Accountant, of the N. A. P. L., this study contains complete, sound cost information for budgeting adequate hourly rates based on present day operating conditions. This is an excellent example of the services rendered members by the National Association of Photo-Lithographers. There's no better time than NOW to find out what N. A. P. L. membership can mean to *you*. Mail the coupon today for complete information.

NATIONAL ASSOCIATION OF PHOTO-LITHOGRAPHERS 317 W. 45th ST. NEW YORK 36, N. Y.

Please send me complete information about membership in the association.

Name ..... Company .....

Street ..... City ..... Zone ..... State .....


PLAN FOR QUALITY
Like the planning of a ship, many elements must be fitted into the structure of fine printing. None is more vital than paper that assures high-fidelity reproduction of halftones—*brush*-coated Cantine paper, from a mill of sixty-seven years experience in coating.

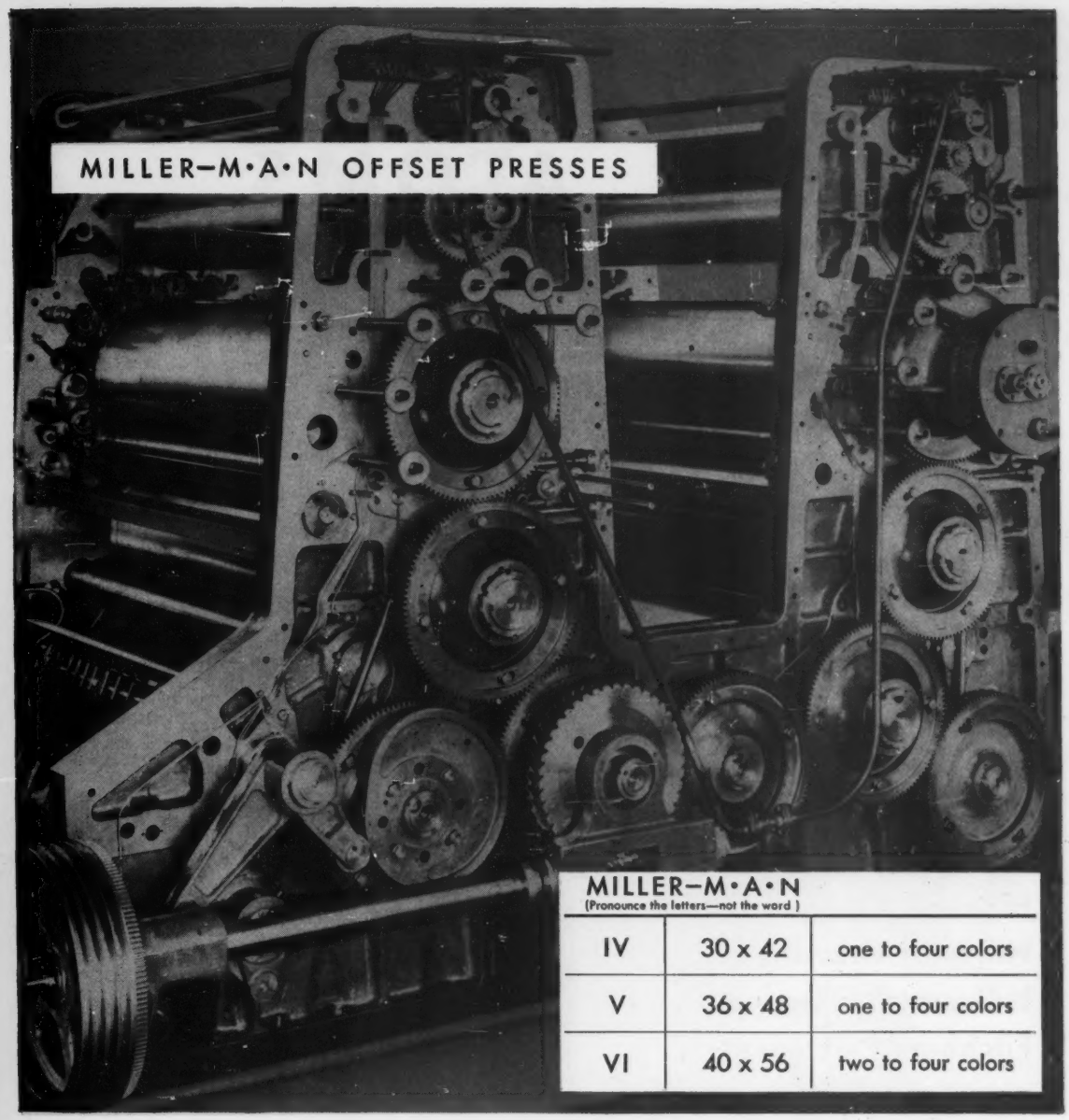
LETTERPRESS
Hi-Arts
Ashokan
M-C Folding Book
M-C Folding Cover
Zena
Catskill
Velvetone
Softone
Esopus Tints
Esopus Postcard

OFFSET-LITHO
Hi-Arts Litho C. 1S.
Zenagloss C. 2S.
Zenagloss Cover C. 2S.
Lithogloss C. 1S.
Catskill Litho C. 1S.
Catskill Offset C. 2S.
Esopus Postcard C. 2S.
Esopus Tints C. 2S.

THE MARTIN CANTINE COMPANY
Specialists in Coated Papers since 1888.
SAUGERTIES, N.Y. and NEW YORK CITY
In San Francisco and Los Angeles
WYLIE & DAVIS

Photo. by Edw. Wilson.

Cantine's Coated Papers



MILLER–M·A·N (Pronounce the letters—not the word)		
IV	30 x 42	one to four colors
V	36 x 48	one to four colors
VI	40 x 56	two to four colors

Streak-free operation

The Miller-M.A.N. Offset Presses have all driving gears outside the press frame. This type of construction not only eliminates gear streaking, but strengthens the impression by making it possible to reduce the distance from the cylinder to its supporting bearings in the frame. Of course, roller supports are also closer, minimizing roller deflection, vibration and shock. This facilitates the laying of a uniform film of ink all over the plate.

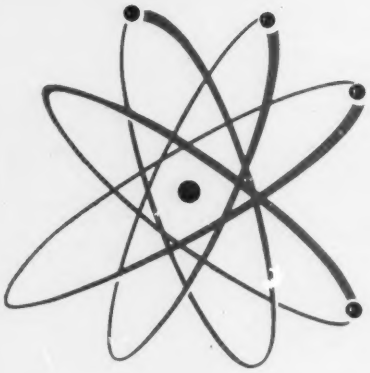
Placing the gears, which are helical and ground, outside the frame has the further advantage of permitting the use of the "oil bath" automatic lubrication system which greatly reduces maintenance time and increases press life.

Write for complete details.

miller

MILLER PRINTING MACHINERY CO.
1135 Reedsdale Street, Pittsburgh 33, Pa.

MILLER PRINTING MACHINERY CO. OF CANADA LIMITED, 730 Bay St., Toronto 2, Ontario



ATOMS for ~~Industry~~ Better Paper!

One of the pioneers in the use of nuclear gauging instruments in industry, Fitchburg Paper Company has Beta ray gauges installed for continuous measuring and automatic controlling of the weight of the furnish entering the papermaking machines at their mills.

Any variation in weight is instantly detected by these radioactive measuring gauges which automatically make the necessary adjustments.

Nuclear energy makes possible these important steps in papermaking control. Fitchburg's pioneering in this is indicative of the company's alertness to utilize every modern development to produce better paper.

Established in 1861

Fitchburg Vellum
Fitch-Brite
Hillcourt Opaque Offset
Hillcourt Greeting
Hillcourt Papeteries
Fitchburg Parchment

Write to the mill for complete information and sample sheets of these outstanding papers.

Fitchburg Paper Company

MILLS AND GENERAL OFFICES: FITCHBURG 6, MASS.
NEW YORK OFFICE: 250 PARK AVE., N.Y. 17

Pressrooms are Buzzin' about

VULCAN DUROFLEX offset Blankets

Around the trade you hear more and more good comments about the new Vulcan Duroflex Offset Blanket. With a growing reputation for dependability, Duroflex is synonymous with even gauge, constant resilience, anti-swelling and greater mileage. Lack of tackiness, so important to fine reproduction, is a basic quality of Duroflex.

Our representatives will call upon you without obligation to discuss your blanket problems and answer your blanket questions.

Another REEVES VULCAN RUBBER PRODUCT

REEVES BROTHERS INC.
VULCAN RUBBER PRODUCTS DIVISION
54 Worth Street • New York 13, N. Y.

Five Times Tougher.....
and Twice as Easy to Apply

That is what we have done to our

IMPROVED

DIS-COVER*

(disposable dampening roller cover)

NOW—DIS-COVER is PRE-WETTED before application to the WET dampening rollers. No tubes or special equipment is needed.

Simply dip your improved DIS-COVER in clean water, it becomes very soft and stretchy, and gather it in your hands and pull it over your roller—It takes but a minute.

NO RE-SETTING OF YOUR ROLLERS—NO CHANGE IN WATER SETTING.

NEW, TOUGHER, YARN INCREASES THE LIFE OF THE IMPROVED DIS-COVER FIVE TIMES.

Improved chemical treatment makes the DIS-COVER more effective than ever in keeping water demand very low. Improved chemicals increase the attraction of scum and tint from your plates — yet — the DIS-COVER remains cleaner than our previous fabric.

Our No. 401 DIS-COVER, selling at $10.20 per 12 yard package, will fit the form and ductor rollers of the following presses:

A.T.F.—14 x 20—17 x 22—22 x 29 and web rotary presses.
HARRIS—17 x 22—21 x 28—22 x 34 (except the Model EL)
Miehle—No. 29 and No. 36
Miller—22 x 34

Our No. 602 DIS-COVER, selling at $11.40 per 12 yard package, will fit the form and ductor rollers of the following presses:

HARRIS—No. EL, LSQ, LSR, S8L, LSC, LSS, S7L and GT
MIEHLE—No. 41 and No. 49
MANN—22 x 34—25 x 36—30 x 42 and 35 x 45
HOE METAL DECORATING PRESSES 34 x 36 and 34 x 45

A TOUGHER, LONGER WEARING, DIS-COVER STILL SELLING AT THE SAME LOW PRICE.

Call your local supplier

NORMAN A. MACK ASSOCIATES, INCORPORATED

Lindstrom Road **Stamford, Conn.**

Trademark and Patents Pending.

can you measure the order that gets away?

What is the cost of an order lost — because your plant doesn't have the right equipment for the job? You may be losing more than an order... it may mean the end of a long-time account — and discouragement for your salesmen.

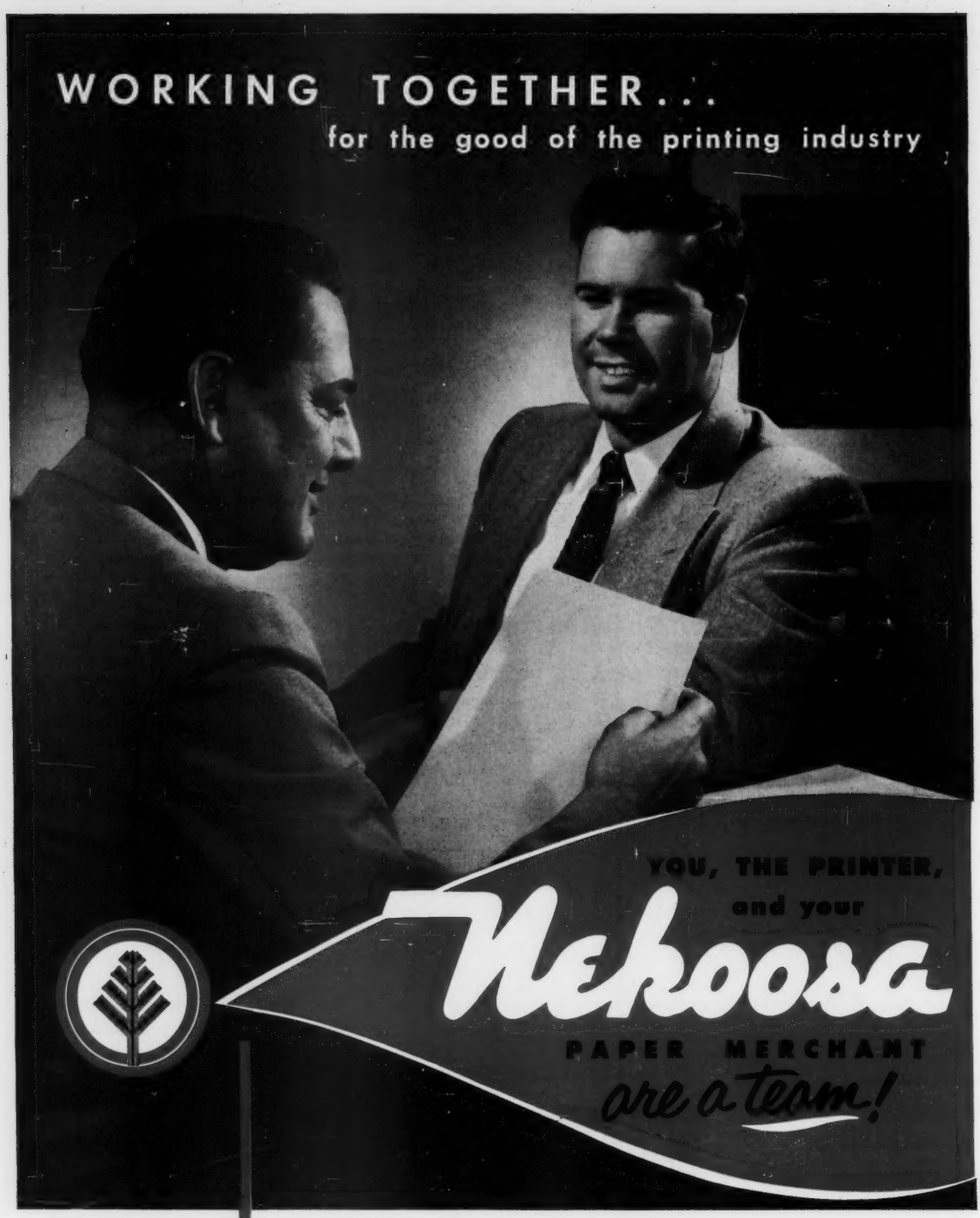
Weigh *those* costs against the investment in the new equipment you need to be ready for today's business and tomorrow's potential. You'll find there's far more profit in updating your plant and replacing wornout equipment now.

Check your equipment... and call Pitman for all your requirements *plus* the services of a trained representative who will counsel you on your needs.

- Arc Lamps
- Cameras
- Deep Etch Down Draft Tables
- Densitometers
- Diaphragm Controls
- Etching and Clearing Tables
- Film Storage Cabinets
- Lenses
- Light Integrators
- Line-up and Register Tables
- Line-up and Ruling Attachments
- Negative Drying Cabinets
- Print Dryers
- Proof Presses
- Screens
- Stainless Steel Sinks
- Stripping and Layout Tables
- Step and Repeat Vacuum Frames
- Vacuum Printing Frames
- Temperature Controlled Sinks
- Water Filters
- Water Temperature Regulators
- Whirlers

HAROLD M. PITMAN COMPANY

Chicago 50, Illinois—33rd Street & 51st Avenue
North Bergen, New Jersey—1110 13th Street
Cleveland 11, Ohio—3501 W. 140th Street
New York 36, New York—230 W. 41st Street



NEKOOSA PAPERS

Bond • Ledger • Duplicator
Mimeo • Manifold • Offset
Opaque • Master-Lucent
and companion ARDOR
Papers

"Any paper problems today?" Many a printer has been asked that question by many a Nekoosa paper merchant. And if the printer does have a problem, your Nekoosa paper merchant is right there with the solution. Sizes? Weights? Colors? Finishes? Other paper characteristics? Your Nekoosa paper merchant has the answers. He is always glad to be of service . . . and proud to work so closely with the members of America's great printing industry.

PRINTING WEEK JANUARY 15-21, 1956

Editorials

'... I just happened to be in the neighborhood ...'

LITHO salesmen are expected to know all there is to know about offset. Whenever a printing buyer addresses a group of lithographers, he invariably speaks with biting sarcasm of the "hail fellow, well met" school of litho salesmen. He usually goes on, in equally indignant tones, to chastise the "I just happened to be in the neighborhood" species, the "talk about sports but not about lithography" type, and many others, equally heinous.

In place of these worthless examples, he would welcome the chance to talk with a litho salesman who knows everything about lithography, knows exactly what equipment his plant contains and what it can do, and can give an estimate on the spot.

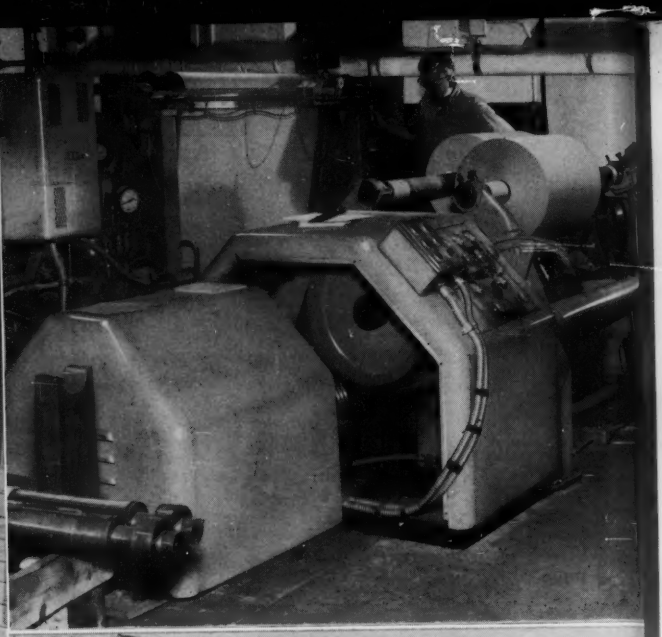
Somewhere between these extremes, we suspect, lie the vast majority of salesmen; the kind who have a pretty fair idea of the limits of their shops, are conversant with most of the tricks of the trade, if not expert at all of them, and occasionally can chance an estimate in the office of the buyer, without recourse to the estimator or production manager.

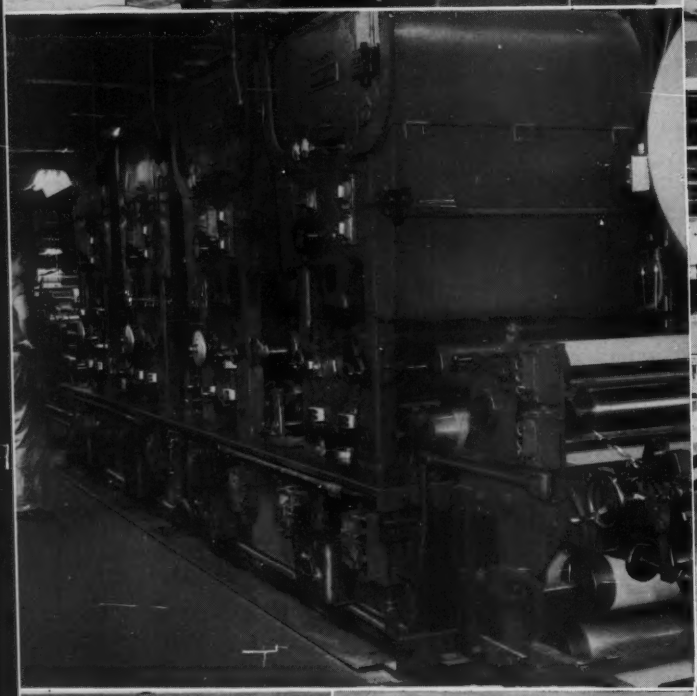
Unfortunately for the printing buyer, the "know-it-all" is a rare bird indeed. The average guy selling lithography spends so much time making his rounds that he must wonder when he ever will get the chance to catch up with the new developments in the industry as well as the new equipment and methods in his own shop. But he must take the time, if he is to be successful, and there are many ways he can use this time profitably. The most obvious way is to join the litho club in his city, and take an active part in it. He can learn a lot from technical speakers at these meetings, and he can pick up a thing or two at dinner, airing his problems with others who work in litho shops. While at the club, he can borrow text books from the Lithographic Technical Foundation library (LTF supplies each club with a library and keeps it up to date with new volumes as issued).

Furthermore, if the salesman's company is a member of a trade association, he can profit by attending its meetings and by consulting the association headquarters. Most associations put out pamphlets and booklets outlining, step-by-step, the advantages of lithography and its place in the graphic arts.

The smart salesman will make double use of this information. He will digest it thoroughly to increase his own knowledge of offset, and he will convince his boss that it makes wonderful material for self-advertising pieces that will be read and kept by the printing buyer, particularly the buyer in the small company. Henry Latimer, executive director of the Metropolitan Lithographers Association, Inc. (New York), in addressing a group of young litho salesmen last month, stressed the importance of this kind of service. He said a survey has shown that information and advice on the use of offset in the planning stage is wanted most by the buyer.

If the salesman provides helpful, keepable information, he'll be able to keep the buyer happy and at the same time avoid an offset quiz show every time he makes a call.





After 50 *Years*

Eureka Relies on Offset

By George E. Toles
New York Correspondent

1. Guillotine cutters, one after another, are used to trim sheets at Eureka shop.

2. Two pairs of eyes, electronic and human, guide the work of the slitter.

3. Four-color gravure press turns out long-run multicolor jobs at the plant.

4. All roads lead to the bindery, for inspection, cutting and collating.

5. Eureka makes a point of service, including a full staff of artists.

6. From this machine shop have come repairs and improvements of all kinds.

A 50-YEAR milestone has been reached by the Eureka Specialty Printing Co. of Scranton, Pa., largest plant of its type in the country. Eureka specializes in turning out trading stamps, TB and Easter seals, coupons, certificates, stationery items and packaging. The firm uses the three major printing processes, but most of its output in black and white or colors is offset lithography.

Its presses, rolling 24 hours a day over a five-day week, consume 15,000,000 tons of paper a year in meeting the needs of scores of clients ranging from giant corporations to small business concerns.

The Eureka story is more than a record of growth. It embraces better design, production and control methods, more effective training and upgrading, closer tolerances, safeguards for every job, and an attitude of viewing production as a service to clients.

The late Forest F. Hendrickson, founder of the concern, named the company in 1905 after the famous exclamation of Archimedes. Today it ranks as one of Scranton's leading industries with 650 employes and a $2,500,000 annual payroll. Started in a little red school house, it has grown into a plant of 170,000 square feet of manufacturing and warehouse space, and was just recently expanded.

Trading stamps were Forest Hendrickson's first specialty printing order. The job was not easy. Gummed paper is slippery and hard to handle; harder to print. The two cylinder presses and three job presses were old.

Four Problems

As the business grew, problems arose which had to be solved by Eureka craftsmen. The four chief problems were:

1. Having a uniform gummed stock.

2. Controlling the manufacture of safety paper to make counterfeiting of stamps and coupons more difficult.

3. Keeping abreast of improvements in printing and plate production and adapting them to Eureka's particular needs.

4. Making it easier to separate one stamp from the others on a sheet.

Take problem number one, gummed stock, originally purchased outside. In time, the number of rolls needed to feed the presses became so great that the delays in delivery held up production. When World War I made gummed paper scarce and drove up the price, Eureka decided to do the gumming itself. From an overhead vat in the plant's modern gumming machine, a stream of hot dextrin gum pours into a spreading trough. A roller turns in the gum and spreads it uniformly on the moving web of paper faster than 50 men with brushes could apply it, and much more evenly.

The moist gum is dried by carrying the web of paper through a long drying oven. On emerging, it is wound into a roll, ready for succeeding operations. The trick in making gummed stock, according to Eureka, is to control exactly the amount of gum spread on the paper. Some jobs require special gums. The selection of the most suitable has come out of years of practice and research.

If a continuous roll of gummed stock were cut to press sizes, direct from the gummer, the surface tension on the gummed side would cause the

(*Continued on Page* 121)

ML Plant Tour

Number 3

Color is playing an increasingly important part in the printed merchandise aids created and produced by Magill-Weinsheimer of Chicago

DEDICATION of a new $1,250,000 plant in the Chicago suburbs last September caps a 50-year record of "firsts" in the lithographing industry for Magill-Weinsheimer Co. The first to install a four-color offset press, the company began operations in 1906 with two Gordons and one Miehle press.

Located in Lincolnwood, the single-level structure is built with yellow face brick, Tennessee crab orchard stone and aluminum trim. It has 126,000 square feet of operating space. One unusual architectural feature is the use of glass for the north wall of the section housing art and design departments. Rising from foundation lines to the eaves, the 2,000 square feet of plate glass was set on a slant, thus reducing glare and providing natural north light.

Functional use of color throughout the building is the most striking feature of the new structure. According to Harry J. Leahy, president, the belief has prevailed that use of colors on interior walls in press rooms, ink mixing departments and other color-critical production areas interfered with the work of these departments.

"For half a century our business has been the production of items in which color has become more and more important. The thought occurred to Mr. Weinsheimer and myself that color psychology could also be applied to our new building," declared Mr. Leahy.

Color Psychology in Plant

Faber Birren, authority on use of color in industrial plants for reduction of visual fatigue, and improvement of morale and safety, was called in to take the job of coordinating the building's interior trim with its functional use.

Only 21 standardized colors were used, Mr. Birren states, but, because of the handling, the color effect seems infinite.

Complete air conditioning has been provided for camera, platemaking and press room areas, as well as in offices and other sections of the block-long building. Press rooms are windowless and the blending and matching of inks and color work is done under fluorescent illumination, day and night.

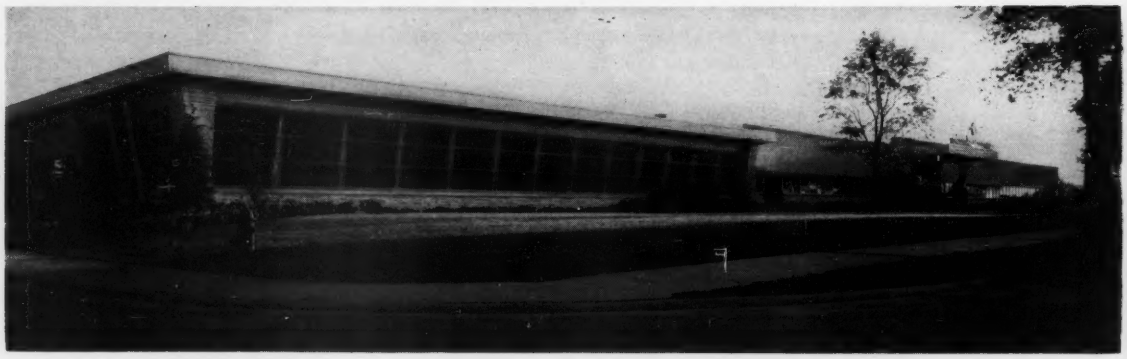
Incoming supplies are delivered to the receiving room at the building's east end and a movable dock section allows quick adjustment of floor level to the height of the delivering truck. Palletized paper stocks and other supplies are moved by motorized shop trucks into storage rooms nearby and then to the production line.

$350,000 for New Equipment

Investment in new equipment which includes two Miehle No. 76 offset presses (one a 4-color unit the other a 2-color), and a 78-inch varnishing machine, said to be the world's largest, totals $350,000. An art gallery where outstanding samples of point-of-sale displays, packages and other Magill-Weinsheimer printed

(*Continued on Page* 129)

New Magill-Weinsheimer plant in Lincolnwood, Ill., boasts complete airconditioning in camera, platemaking and press-room areas, also in offices and other critical sections of the building. Functional use of 21 colors for interior trim is an innovation in use of color psychology in graphic arts production plants.



Color Stripping with Stripfilm

By Bernard R. Halpern

THE handling of stripfilm requires removing it from its temporary support and then transferring it to the blueline flat or to a new film support. (See Fig. 1.) It must be correctly positioned, stretched to correct size, and then adhered in register location. As stripfilm is elastic, especially when wet, it is easily stretched or distorted out of shape. Stripping of larger subjects frequently is done by fitting to both the subject detail appearing on the bluelines and to the register and corner marks, in order to assure close color register of all the printed details. Stripfilm subjects usually are photographed slightly undersize, from one half percent to two percent, as it is easier to stretch them into a register fit with the blue image than to try to contract them to size. Stripfilm in general adheres fairly well when applied with its emulsion side in contact with a clean surface on the flat. Difficulty in attaching it to the flat frequently is experienced when transfering stripfilm without flopping it.

Normally it is desirable to complete a set of color flats, proof and cross-check them, before releasing them to the platemaker. However, an urgent delivery schedule, or the anticipation of misregister caused by paper expansion, or by other press conditions, may make it advisable to complete only the flat for the first color to be run on the press. The other color flats then are partially completed and held in readiness. The critical register subjects are stripped in as soon as the necessary changes in location of the individual films are determined.

This is another chapter in the new Skilled Craft Text No. 512, "Offset Stripping — Color," which has been published by the Lithographic Technical Foundation, 131 E. 39th St., New York 16. The volume sells for $5 a copy to non-members of the Foundation, $1.50 for members. This material is published with permission of LTF. See the October and November, 1955 issues of ML for other sections.

Negative Flats, "Dry" Stripping

"Dry" stripping is the preferred method of handling stripfilm. There is less tendency for the film to distort its image or image dimensions in this condition. "Dry" stripping refers to drying the stripfilm on its temporary support after development, and delivering it dry to the color stripper. For use, the stripper either can peel the film off its base and handle it carefully as an independent thin film, or if preferred, he can leave it on its temporary support until prepared and applied in position on the flat. Just prior to stripping, the "dry" stripfilm is immersed in a three percent acetic acid solution, for 10 to 15 seconds. This softens it slightly for adhesion and stretching. The procedure follows:

A. Place the blueline flat on the stripping table. Position all the stripfilms for the first color in approximate location on the flat to assure that all have been supplied and are in satisfactory condition for stripping.

B. Place all supplies necessary for stripping convenient to their use locations. This will include blotter squares, stripping cement, brushes, razor blades, artist knife, dividers, needles, ruling pen, opaque, cotton, a container of water, etc. A tray large enough for the largest stripfilm and containing the three percent acetic acid solution should also be conveniently placed.

C. Start with the principal subject, or the near edge of the flat, and select the first subject to be stripped. Note whether it is to be "flopped" with its emulsion side down or transferred on its back. If "flopped," leave it on its temporary support. Immerse it in the tray of the three percent acetic acid solution for 10 to 15 seconds. Then draw it out, allowing it to drain for a few seconds, and place it face down on a small pool of stripping cement, Formula 15, in approximate position on the flat.

Formula 15
STRIPFILM CEMENT

	Metric	*U. S. Units*
Gelatin	30 g	1 avoir. oz.
Water to soak	125 cc.	4 liq. oz.
Water, boiling, to dissolve	500 cc.	16 liq. oz.
Acetic acid, 28%	22 cc.	¾ liq. oz.
Water to	1000 cc.	32 liq. oz.

Insert a knife blade between the stripfilm and its temporary base, along a previously loosened corner or edge. Carefully peel off the temporary support, curling it away and holding the stripfilm down with the edge of a blotter square. Then, using two blotter squares, gradually work the film over so that it is centered and square over its blue image. Next use the blotter squares as squeegees (See Fig. 2) and grad-

ually sequeegee the stripfilm down against its flat. Wipe from the center of the film outward in all directions. At the same time stretch the film slightly, by blotter pressure, so that its image and marks are exactly in register with the blueline image and register marks on the flat.

NOTE: If bluelines were made from a key consisting of an assembly of stripfilms temporarily taped in position, the blue images of each subject will be slightly undersize, but otherwise centered in their locations. They can still serve as a guide. The stripfilm will be applied to register with the center and corner marks and to be uniformly expanded around the blueline images.

Blot off excess cement with a dampened cellulose sponge or blotters.

D. Repeat the stripping operation with the next subject, working it down into contact and register position. If it overlaps the previous film, cut through one or both films with a sharp razor blade along a straight edge, or by free hand. Select a cutting line that will keep away from the work detail on both adjacent films. Then carefully lift away the cut-off strips. Press the films down again by wiping with the blotter squares. If any air bells remain under the film, work them out with the blotter square. If unsuccessful, lift the film up to the bubble, pour in a few drops of the cement, then wipe the film out again. Similarly if any foreign matter such as lint, bits of film, etc., are covered, release the film and remove them while the film is still damp. Then re-cement it down in position. Air bells or foreign particles cause vacuum contact difficulties and possible rupture of the stripfilm when later used in the vacuum frame, or on the step-and-repeat machine during platemaking.

E. Repeat with all other films, stripping them up until the entire job is stripped together. As good adhesion is in part conditioned by the cleanliness of the glass support, care should be taken throughout the entire operation to keep fingers and elbows away from the working areas of the flat. Armboards or clean paper should be used for rests, if necessary.

F. Add in all required reference and guide marks that may be included in the blueline flat but are missing from the stripfilm negative. Some of these can be obtained easily by locally staining the blue image into a brown or black image using the six percent potassium permanganate solution. If desired, the brown image can be blackened with the silver nitrate solution in formula 5.

Formula 5

BLACKENER FOR BLUELINES

Stock	*Metric*	*U. S. Units*
A Potassium Permanganate	60 g.	2 avoir. oz.
Water to	1000 cc.	32 liq. oz.
B Silver Nitrate, Crystals	60 g.	2 avoir. oz.
Water to	1000 cc.	32 liq. oz.

Stock separately for use. Use rubber gloves as stock B will stain hands.

Apply Stock A solution carefully in the area to be stained brown, using an artist's camel's hair brush. Blot, then apply water. Blot again. Blacken by applying stock B to the same area and let it soak for one to two minutes. Blot, wet, with water, and blot again to remove residual chemicals. Then blacken by applying hydroquinone contrast developer in the same way. Wet with water and blot several times. Repeat with a 25 percent hypo solution. Blot, apply water, blot again, then dry. Other guide marks that are required can be stripped in location or cut into the stripfilm as small "butterfly" marks using a sharp knife or razor blade. Openings for inserting the color block, gray scale and LTF Sensitivity Guide then are cut through the stripfilm in the required locations and the stripfilm peeled off these areas with an artist's knife. When the flat is dry, the LTF Sensitivity Guide and gray scale are temporarily attached in position with tabs of cellophane tape to serve as the exposure control in platemaking.

G. After the stripping has been completed, check that all stripfilm sections are adhering to the flat. To assure adherence, particularly where the stripfilm has been transferred on its back, paint the edges with a thin coating of the stripping cement. Use an artist's No. 2 or No. 4 camel's hair brush for its ap-

Fig. 1. Transferring Stripfilm

plication. A thin coating of collodion or clear negative varnish similarly can be applied after the stripfilm has dried thoroughly. These afford a better edge seal and are preferred if the stripfilm is applied emulsion side up.

H. Opaque out all stripfilm joints that transmit light and other small areas that are not to print. Apply opaque so that it covers with a single stroke, as repeated wetting with opaque may cause the edges of the stripfilm to lift. If light can still be seen through the opaque, as pinholes or in spots, work on some other section, and return to correct the light leakage after the first application of opaque has dried. When applying opaque to border illustrations, use a correctly sharpened ruling pen. Test it first on a non-printing marginal area of the stripfilm, or on a waste piece of stripfilm. Then lightly and steadily rule in the lines, guiding the pen along a relieved triangle or straight edge. Do not re-rule wet lines.

Once the border lines have been ruled, the surrounding areas can be opaqued up to the lines. Use a No. 6, No. 8, or one-half inch wide camel's hair brush and apply the opaque with a light steady stroke. Large areas that are not close to illustrations or work detail can be opaqued out by using strips of tinfoil or aluminum foil. First cut them to width and size using a razor blade and straight edge on a clear section of the stripping table. Then place them in exact position and wipe the foil down flat with a section of the blotting paper. When correctly positioned and flat, secure the foil by lifting the corners and touch the flat underneath it with a small spot of rubber cement. Then squeegee down again with the blotter square. Small tabs of double-coated self-adhesive cellophane tape also can be used to secure the foil in place of the rubber cement. Locate tape tabs at least one-half inch away from subject detail, and do not overlap them. The foil can also be applied by lightly wiping the side to be placed against the flat with a thin film of grease such as "Vaseline" reduced with solvent, to make it self-adhesive. It can then be placed in location and wiped flat with the blotter squares or a soft rubber squeegee blade.

Fig. 2. Using Blotter Squares as Squeegees

I. Check the entire flat against the copy, job ticket, and other instructions for evidence of errors or defects. When the flat is satisfactory, mark the job number, name, date, and other required data on the designated margin of the flat, using china white or red opaque for maximum visibility.

J. Place the finished flat on the rack. If it is not to be used immediately, place a protective fiberboard or tempered pressed-board cover over the flat.

Negative Flats, Wet Stripping

Wet stripping is used when job urgency necessitates immediate stripping after photography. This is usually necessary for applying corrections or last minute changes, and where possible subject distortion is not a serious factor. The stripfilm sections will be received wet in a tray of water. Stripping procedure will follow that for "dry" stripping as described in the preceding section. If the stripfilm has released from its temporary support while in the tray, it should be carefully picked up on the same or similar support while it is still in the water. Uncurl the stripfilm and carefully draw it out flat again, using a blotter or felt square. Drain off the excess water and then transfer the film, one section at a time, to the flat and strip it in place.

Positive Flats

Stripping procedure for positive flats is identical to that for the "dry" or wet stripping of negative flats already described, except that the following precautions must be observed:

A. As the areas surrounding the work detail are clear, they must be kept clean of dirt specks, opaque spots, etc.

B. Extreme care must be observed not to trap dust or other specks between the stripfilm and the glass, as these can reproduce on the pressplate.

C. Cut edges of stripfilm may cast shadows and print as fine lines on deep-etch or multi-metal plates. Consequently, the stripfilm margins should be left as large as practical beyond the work areas to make it easier for the platemaker to touch out the marks. Some operators blend in the stripfilm edges so that they will not cast shadows, by applying a stripfilm solvent such as ethyl methyl keytone, lightly along the edges, using a fine brush. The brush should be of synthetic fibers as the solvent may gradually dissolve away hair brushes. The stripfilm edge shadows can also be partially or completely eliminated by brushing a thin stroke of clear

negative lacquer or collodion along the edges so as to diffuse the light refraction and reflection of the cut edges.

D. When screen tints or other overlays are to be stripped over already applied stripfilm, they should be large enough so that their edges extend beyond the work detail underneath. If this is not done, the cut lines mentioned in section C may print in platemaking, as edge blending methods cannot be applied satisfactorily in such instances, and they will be very difficult to touch out on the pressplate.

Stripping On Film Or Glass Negatives

Where the original copy has been prepared for stripping-in subjects, such as adding color illustrations to text matter, the illustration areas will be represented by red or black areas, bordered by register and corner marks. However, reflections of the exposure lights in photography, and dust specks on the copy or copyboard glass may develop up as black specks in the clear areas. If these specks will interfere with the detail to be stripped in, they must be cleared up before stripping. Clearing such areas can be accomplished easily by the dot-etcher who has the necessary chemicals and facilities at hand. If such clearing cannot be taken care of by the dot-etcher, the stripper can proceed as follows:

A. Place the negative, emulsion side up, on a level sheet of plate glass supported above the trough or dot-etching sink so that some light can be seen through the negative. Using an artist's camel's hair brush apply the following reducing solution to the clear area.

Formula II
FARMER'S REDUCER

Stock		*Metric*	*U. S. Units*
A	Water	300 cc.	10 liq. oz.
	Hypo	30 g.	1 avoir. oz.
B	Water	300 cc.	10 liq. oz.
	Potassium Ferricyanide	4 g	⅛ avoir. oz.

Dissolve and stock each solution separately. Mix immediately before using.

Carefully brush to the margins of the clear areas and avoid coming too close to work detail surrounding the area, because of possible solution spread. Continue circulating the solution in the area until the film is uniformly clear. Then flush well with water, or place the negative in a tray of running water for several minutes. The negative can then be sponged, squeegeed or drained, and taken to the stripping table for immediate stripping, or if can be dried for later use.

For very close clearing, where adjoining work may be endangered, the areas surrounding defective clear openings in the dried negative should be painted out with a staging lacquer or varnish such as those used by dot etchers. Waterproof self-adhesive tape can also be used for this purpose. The clearing can then be safely accomplished by local application of the reducing solution. An alternate method, now little used, is to cut through the emulsion to the glass beneath. A film softener such as 28 percent acetic acid is applied to the area to be cleared, allowing it to soak for a short while. Using a sharp knife, the entire area of emulsion can be lifted to clear it for stripping. However, better adherence will be secured if this method is not used and if the emulsion is permitted to remain to form the base for attaching the stripfilm.

B. Place the stripfilm temporarily in position, and mark the size to which it is to be trimmed. Then trim to size before stripping so as to avoid the possibility of cutting into the base film. An exception will be necessary for close fitting work such as joining detail, or insertion of line borders, for which the trimming will be done after stripping in position.

C. Stripping procedure will be identical to that for glass flats using a small pool of stripping cement and following the operations described in the sections on negative and positive flats.

Combination Film and Stripfilm Flats

For classes of work where the flats will be kept "standing" for remakes of pressplates with periodic subject changes, such as catalogs printed for different suppliers using the same illustrations and format, for price revisions, or where standard stock color separation subjects on film are to be temporarily used on different flats, cut film sections can readily be combined with stripfilm on flats. The procedure will follow normal blueline flat preparations and stripping. The cut film sections are taped in position, using tabs of transparent or red self-adhesive tape, as required, and the following precautions are observed:

A. Thin base film must be used. The heavier the base, the greater will be the out-of-contact area surrounding the film.

B. The film margins should be at least one-half inch away from adjacent stripfilm work detail if at all possible. If this cannot be done, the platemaker will have to compensate for this condition in his exposure by using a single light source.

C. The tabs of self-adhesive tape used should be cut and placed so that they do not overlap adjacent work detail. Similarly they should not overlap each other. When red tape is used to border an illustration, it should be carefully cut after bordering so that the knife will not penetrate through the emulsion on the film. The excess of each strip of tape is then removed to produce a clean edge and butt joints. Any light leakage still evident can be blocked out with opaque.

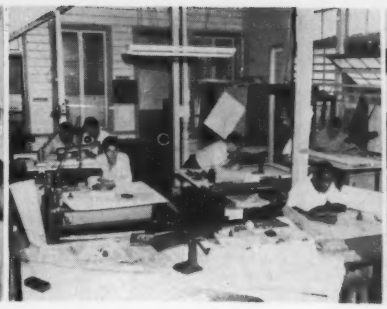
D. As lifting the self-adhesive tape that contacts stripfilm may pull the stripfilm loose from the flat, care must be observed in its application and in the later removal of the film sections. Remove tape slowly, bending it back almost parallel with the flat, to minimize this danger.

E. Where critical detail appears along adjacent edges of film and stripfilm sections, it may be helpful to combine them into a single film or stripfilm section by contact or double printing methods.

F. For close-fitting combinations of cut film and stripfilm over the entire flat, it will frequently be desirable to prepare two comple-

(*Continued on Page* 123)

Litho directors: Don Federico Gutierrez B. (l.) and Mario Barantes F.



View of the cartographic drafting section of the Costa Rican plant.

ATF Webendorfer 22 x 29" press is an important piece of litho equipment.

Lithography in Costa Rica

CAPT. Harold N. Acrivos is a busy man. When *ML* interviewed him a few months ago for an article on how the army trains lithographers at Ft. Belvoir, Va. *(Sept. 1955 ML, page 43)*, there wasn't room to fill in all the interesting background of the captain.

Last month he stopped in at the *ML* office to tell us about the most fascinating phase of his lithographic experience—setting up a lithographic reproduction unit for mapping in Costa Rica, but he couldn't stay long. He was finishing up some personal business before the next step in his active career—serving at one of the largest litho plants run by the U. S. Army, the Tokyo base litho plant, where he will be stationed for several years.

Meanwhile, two lithographers he trained in Costa Rica are carrying on in his absence, lithographing maps of the previously uncharted Central American nation. They could never have done it without his years of patient assistance from 1946-1951, for Capt. Acrivos not only taught the natives lithography (in Spanish), but instructed them in map making as well, all the while running a one-man fund-raising campaign with the Costa Rican government to buy more equipment and supplies for the expanding litho plant.

During World War II, he was called into the Army from the National Guard and served in Australia as a litho instructor. He was subsequently discharged, but was called from the reserves in 1946 to serve as officer in charge of the Cooperative Inter-American Geodetic Survey in Costa Rica. There he worked with the Instituto Geografico Nacional de Costa Rica to set up the reproduction unit for mapping. The purpose of the unit was to make the country independent as far as mapping was concerned.

Captain Acrivos worked with four members of the newly formed I.G.N. de C.R., using a modest Costa Rican allotment as a starter.

Many Problems

"We had lots of problems," the captain told *ML*, "before we got rolling. In the first place, it takes an awful lot of preliminary work in mapping before you can show any tangible results, and the government wanted to see results before making additional grants of money. It was a vicious circle, but we managed to make slow progress."

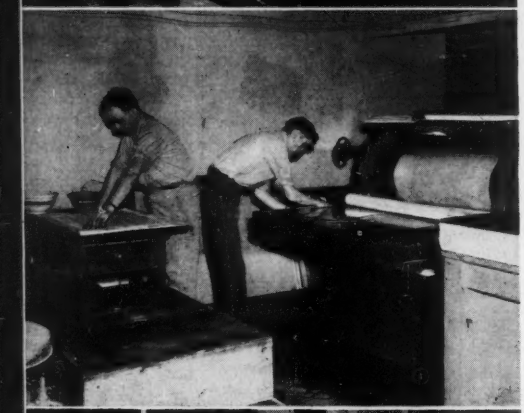
He told how the group took four years setting up the "first order of control," a set of simple base points from which more detailed mapping can be made. Finally, in 1952, litho equipment was purchased and the men were trained to use it. A Multiplex instrument was used to determine topographic measurements from aerial photos. In 1953 the unit had something to show the government for all its labors—a single sheet map of a 25-mile square area around San Jose. Since that time, many more sheets have been added, under the direction of Captain Acrivos' two former assistants: Don Federico Gutierrez B., now the director, and Mario Barrantes F., sub-director.

Litho Equipment

The Costa Rican unit had only a small room (20 x 30') to start, but it has grown since 1946, and many employes have been added in the lithographic shop.

Equipment includes an ATF Webendorfer press, size 22 & 29", a 31" Robertson camera, a Brown whirler and a Saltzman rectifying enlarger. International Paper Co. has supplied much of the paper used for the maps. Plates are sent to Panama to be grained.

Capt. Acrivos obviously was proud of the steady progress made by the Central American litho unit. "The last I heard they were getting another press to handle the increased production," he stated. And he has other Costa Rican achievements to brag about. In 1947 he married a Costa Rican girl and now has four children. Capt. Acrivos is a man who gets things done.★



1. Negative engraving on glass, USGS.

2. Copper plate engraving, Dept. of Int.

3. Camera section, Dept. of Interior.

4. Hand transferring is done at USGS.

5. View of the graining room at USGS.

Government

U. S. Owns, Operates in Washington, D. C. of others in

By Mike Geary
Washington Correspondent

WASHINGTON, D. C. is the mecca for many fields of endeavor, the majority of which are concerned with politics, international organizations and government operations in some form. Though not always aware of the fact, the average person in the District of Columbia area, regardless of trade or position, will find his work aimed accordingly.

In the graphic arts field, the lithographer is hardly an exception. He is either employed directly by the government, by one of the 700 various association headquarters, many of which operate their own offset duplication and publication facilities, by one of the 76 lithographic plants and trade shops or by one of the untold number of duplicating and letter shops, all of which play an important part in the production of printed matter for the United States Government.

There is an amazing number of people in the litho trade throughout the U. S. who assume that every piece of government literature is a product of the Government Printing Office or of a commercial shop contracted by GPO.

82 Shops

Although GPO does produce a vast majority of official publications, Uncle Sam still is able to find a sufficient workload for some 82 shops which he owns and operates in the District Of Columbia and the government structure which extends into the neighboring states of Maryland and Virginia.

To settle the question of authority for the operation of these 82 shops and an additional 417, government owned and engaged in printing and lithography throughout the world, we consulted the official records. Extracts from the United States Code, title 44, Section 4, state that by authority of Congress, "The Joint Committee On Printing shall have the power to adopt and employ such measures as, in its discretion, may be deemed necessary to remedy any neglect, delay, duplication or waste in the public printing and binding and the distribution of Government publications."

The Joint Committee On Printing is often mentioned in trade periodicals, but its many and varied duties are rarely discussed. This governing group is responsible for the tons of printed material required and produced annually with federal funds.

The Joint Committee consists of three Senators and three Representatives. Current members are Sen. Carl Hayden, Arizona, chairman; Rep. Omar Burleson, Texas, vice chairman; Sen. Theodore F. Green, Rhode Island; Sen. William E. Jenner, Indiana, past chairman; Rep. Wayne L. Hayes, Ohio; and Rep. Karl M. LeCompte, Iowa. James L. Harrison, of Washing-

Litho Shops

82 Lithographic Plants area and hundreds all parts of World.

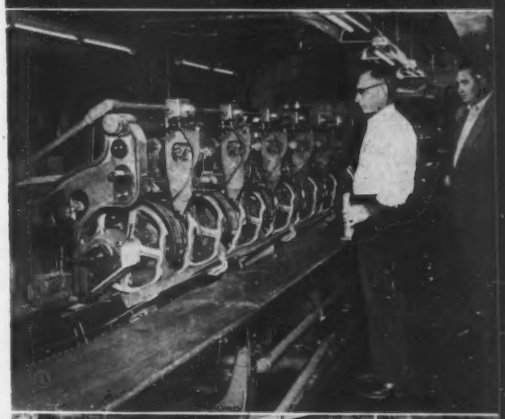
1. Press room, U. S. Geological Survey.

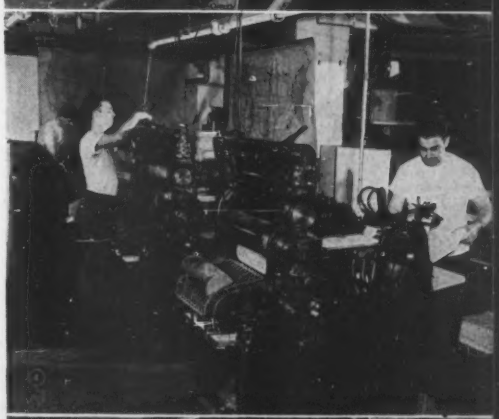
2. C. W. Bennett (center left) chief of reproduction division USGS, and Harry N. Luber, assistant chief, inspect new photo composing machine.

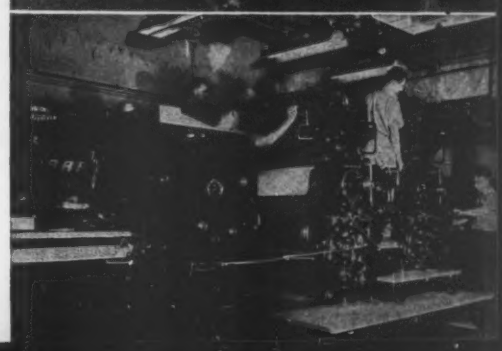
3. C. E. McKay (l.) manager of Federal Trade Shop, demonstrates 16-station collator to the author, Mike Geary.

4. Press room, Federal Trade Commission.

5. New Harris-Seybold press at USGS.







ton, D. C. is staff director for the committee.

Control Group

Acting as a control group responsible to Congress, the Joint Committee maintains adequate control procedures for all printing, binding and distribution, eliminating unessential printing and excessive costs to the government. No plant may be operated without prior authorization by the Committee.

When a government agency reaches such proportions that efficient operation requires its own printing facilities, there is more involved than simply ordering equipment and hiring personnel. The Committee takes charge, digesting the agencies' request and, when necessary, drawing upon a pool of surplus equipment from other shops or authorizing the purchase of new equipment.

A booklet containing government printing and binding regulations is published by the Committee at the beginning of each fiscal year and distributed to all government plants. This publication reflects the mission of the Committee in its opening paragraphs, wherein the prime order is respect of the tax dollar.

The government offset shops in and around Washington are grouped in two classifications, Departmental Plants and Field Plants. The Departmental Plant is the base unit of a specific agency and usually is located in Washington. The Field Plants, with few exceptions, are located outside Washington and production of each is generally pertinent to geographic location.

The Joint Committee further classifies the shop as "Class A" or "Class B," representing authorized capacity. The "Class A" shop is limited to equipment not larger than 14 x 20", printing from flat sheets. The "Class B" shop carries equipment larger than 14 x 20", either flat sheet or web-fed.

Class B Shops

It would be difficult to guess the order of importance of the Class B shops. However, in order of size, The Army Map Service, located across the District line in Maryland, would head the list with more than 30 offset cylinders, including a 42 x 58 Harris four-color and a five-color Miehle 61, capable of producing 6500 five-color maps per hour. The primary product at AMS is the military map and the scope of operation in this vast organization is at international level.

In suburban Suitland, Md., the Department of Navy operates the Navy Hydrographic Office. This 'office' covers a city block and maintains a huge and modern reproduction plant, geared for quantity and quality in turning out hydrographic charts and data for the Navy.

In downtown Washington, the two largest shops are the Department of Commerce, U. S. Coast and Geodetic Survey and the Department of Interior, U. S. Geological Survey. These

Lithographer at the Navy Hydrographic plant examines a color proof made on vinyl plastic at the offset shop.

Jerry Looney, head of the Navy Hydrographic Office, explains the technique to visiting Argentine Navy officials.

too, are both mapping agencies, publishing multi-color maps on large color equipment.

Other Class B shops located in the heart of the city include the U. S. Weather Bureau and the Division of Printing Services, each a function of the Commerce Dept.; the General Services Administration Printing and Distribution Branch, Department of Interior Duplicating; Department of Labor; Department of Justice (FBI); Department of State; Treasury Department (Internal Revenue); and Veterans Administration. Also in this category, the Department of Defense maintains the National Security Agency shop near residential northwest Washington and The Defense Printing Services, under Navy management in the basement of the Pentagon.

Class A Shops

Of the shops in the Class A category, the one operated by the Federal Trade Commission is typical. Occupying basement space in the Federal Trade building, the equipment consists of two 14 x 20" Webendorfers, one model 1275 Multilith, camera and platemaking equipment, power cutter and folding machine and a Xerox unit. One item of equipment however, could not be classed as typical. Federal Trade owns a 16-station collator, custom-built by Martin Machinery Co. and claimed to be the only one of its type in existence.

Other downtown Class A shops include the following: Administrative Office of U. S. Courts, Department of Agriculture (office and plant operations), Bureau of the Budget, Civil Service Commission, Department of Commerce (Patent Office), Federal Communications Commission, Federal Power Commission, General Accounting Office, Department of Health, Education and Welfare, Housing and Home Finance Agency (three shops—Federal Housing, Public Housing and Home Loan Bank), Interstate Commerce Commission, Department of Justice (two shops — Administrative Division and Immigration and Naturalization Service), Library of Congress, National Advisory Committee for Aeronautics, Post Office Department, Security and Exchange Commission, Selective Service Commission, U. S. Tariff Commission and Treasury Department (four shops—Administrative Services, Coast Guard, Controller of Currency and Bureau of Public Debt). All of the foregoing fall in the Departmental Plant classification.

Field Plants

In the Field Plant category, Department of Agriculture operates a B plant for its Soil Conservation Service at Beltsville, Maryland. The Department of Air Force and the National Advisory Committee for Aeronautics maintain B shops at Langley Air Force Base, Hampton, Va. The Army, Corps of Engineers, has class B installations at Fort Belvoir, Va. (Topographic School, Sept., 1955 *ML*, page 43) and Baltimore, Md. and an A shop at Gravelly Point, Virginia (OCE). Department of the Army operates other miscellaneous A shops at Aberdeen, Camp Detrick, Edgewood, Fort Holabird and Fort Meade, in Maryland and in Virginia at Fort Eustis, Fort Monroe and Richmond. Class B plants at Fort Belvoir, (in addition to the topo school) and Fort Lee, Va., also are under Army control. The Department of Health, Education and Welfare owns class A field plants at Bethesda and Baltimore, Md.

There are only six Field Plants in Washington: Army Finance (A), National War College (A) and Armed Forces Institute of Pathology (B). The Navy has three: PRNC Publications and Printing Office (B), Naval Research Laboratory (A) and the Naval Photographic Center (B). Additional Field Plants are operated by the Department Of The Navy in Maryland and Virginia as follows:

Location	*Organization*	*Class*
Annapolis, Md.	Naval Academy	B
	Engineering Experiment Station	A
Bethesda, Md.	National Naval Medical Center	B
Dahlgren, Va.	Naval Proving Grounds	A
Indian Head, Md.	Naval Ammunition Depot	B
Norfolk, Va.	Commander In Chief—Atlantic Fleet	B
	5ND Publication & Printing Office	B
Patuxent River, Md.	Naval Air Test Center	A
Portsmouth, Va.	Norfolk Naval Shipyard	B
Quantico, Va.	Marine Corps School	B
White Oak, Md.	Naval Ordnance Laboratory	B

Although the U. S. Government owns and operates 417 shops in addi-

One of two new 22 x 34" ATF Mann presses recently installed at Craftsman Press, to handle government work.

Registering negative masks for gradient elevation plates at the Navy Hydrographic Office, is done by lithogapher.

tion to the 82 in and around Washington, nowhere else will you find as heavy a concentration.

The Veterans Administration operates a number of plants throughout the country for therapeutic purposes only, of which two are located in Maryland at Baltimore and Perry Point and three in Virginia at Kecoughtan, Richmond and Roanoke.

In addition to the tremendous volume of material turned out by the government shops, the various agencies and departments are granted annual budgets for contracting of such orders as may be impractical to accomplish in their own shops, GPO or Field Plants. Consequently, the majority of this money goes into private industry by means of procurement from commercial lithographers and printers.

Some idea of the finances involved in this annual contract procedure may be gathered from authorized allocations for the fiscal years 1954 and 1956, published by the Joint Committee on Printing. An increase of nearly 2½ million dollars for contract work is shown in the combined budget over the period quoted.

It would be impossible here to discuss in detail the many types of contracts offered under this budget, the ever-increasing competition in bidding or the pros and cons voiced by the trade in connection with government contracts. However, it may be said that there are commercial shops in Washington and elsewhere, that, for various reasons, refuse to bid on government contracts because of bitter past experiences, while other shops bid regularly only to find the competition too stiff to allow the margin to which they are accustomed. Those falling in such categories are in the minority. The experienced and seriously interested bidder is able to expect a fair result when bidding fair trade prices. In addition, there are some commercial shops which depend largely on the government contract and are equipped to handle this type of work, on which they bid with regularity.

Notwithstanding the millions of dollars expended annually by the government for commercial contracting, it's quite evident that this money is used only to augment the workload of Uncle Sam's own printing and publishing business and nowhere else in the world is it more noticeable than in and around Washington, D. C.★

Printing Budget—1954 and 1956

Department or Agency	*Fiscal Yr. 54*	*Fiscal Yr. 56*
Admin. Office, U. S. Courts	$ 95,000.00	$ 105,000.00
Dept. of Agriculture	135,000.00	165,000.00
Dept. of the Air Force	6,697,000.00	8,649,000.00
Dept. of the Army	2,500,000.00	2,890,000.00
Atomic Energy Commission	20,000.00	20,000.00
Bureau of the Budget	500.00	—
Civil Service Commission	4,000.00	7,500.00
Dept. of Commerce	30,000.00	35,000.00
Federal Civil Defense Admin.	1,000.00	1,500.00
General Services Admin.	90,000.00	90,000.00
Health, Education & Welfare Dept.	21,000.00	28,000.00
Housing and Home Finance Agency	3,000.00	3,000.00
Dept. of Interior	265,000.00	225,000.00
Dept. of Justice	130,000.00	130,000.00
Dept. of Labor	1,000.00	1,600.00
National Advis. Com. for Aeronautics	5,000.00	15,000.00
National Labor Relations Board	100,000.00	50,000.00
National Mediation Board	68,500.00	67,500.00
Dept. of the Navy	4,500,000.00	4,350,000.00
Panama Canal	14,300.00	10,500.00
Post Office Dept.	160,000.00	323,000.00
Railroad Retirement Board	10,000.00	10,000.00
Securities and Exchange Comm.	500.00	1,500.00
Dept. of State	2,000.00	25,000.00
U. S. Tariff Commission	300.00	300.00
Treasury Dept.	22,500.00	145,000.00
Veterans Administration	100,000.00	84,000.00
TOTALS:	$14,987,600.00	$17,437,000.00

DUE TO PATTERNS COVERING PRINT, THIS PAGE DID NOT REPRODUCE WELL. THIS REPRODUCTION IS MADE FROM THE BEST COPY AVAILABLE.

PRINTING WEEK January 15-21

PRINTING Week this year will definitely be the biggest ever held (more than 200 cities taking part) and very likely the largest in scope and number of programs.

That was the estimate at press time, as P.W. celebrations were set in motion in cities throughout the United States. Lithographers everywhere were playing a big part in these celebrations, holding separate meetings and contests in a number of cities; joining with other graphic arts groups for a combined observance in other cities. Last year 158 cities took part in the program, so the 1956 celebration represents a 30 per cent increase in activity, as far as number of cities is concerned.

Not all the news reports had been received by press time, but information at hand revealed the following about the nationwide observance:

Cleveland

United action by all segments of the Cleveland graphic arts industry was prominent in the city's 1956 Printing Week observance. The unity was typified when representatives of major printing groups gathered for the proclamation-signing, shown below.

As a new way of giving continuity and broader participation to Cleveland Printing Week, a permanent, nonprofit "Graphic Arts Institute of Cleveland" was founded this year by local trade leaders, to sponsor the city's big Printing Week program. Back row (l-r) are George Wise of Dugan-Mills, Inc., first vice president of the International Association of Printing House Craftsmen; Art Hogling, of Western Newspaper Printing & Matrix Co., president of the Cleveland Craftsmen; Wm. Feather, Jr., of Wm. Feather Company, president of the Printing Industry of Cleveland, Inc. (P.I.A.); and Paul Meunier, of R. E. May Company, 1955 president of the Cleveland Litho Club.

Seated are Fred Baker, of Harris-Seybold Company, general chairman of 1956 Cleveland Printing Week; Cleveland's Mayor Anthony J. Celebreeze, and Ben D. Zevin, president of World Publishing Company, who is also president of the Graphic Arts Institute of Cleveland.

•

Boston

Sen. William F. Knowland, of California, Senate minority leader, was to be the guest speaker at the 10th Annual Printing and Publishing Week of New England. "People the world over," he said, "will be paying tribute to one of the country's great men of all times, Benjamin Franklin.

"To the printers of America, he has become their Patron Saint. He learned his trade in Boston, Philadelphia and London and successfully engaged in the business for 20 years. He knew how to print and how to use printing, and as a printer he accumulated the fortune that made his good works possible. His epitaph, which he wrote himself, refers to him only as a printer."

•

Chicago

Fifteen major industry-wide meetings were scheduled in Chicago, with lithographers taking a big part. Each group planned its own meeting, inviting attendance from others. Several TV shows were planned. Mayor Daley issued a P.W. proclamation, while the local Craftsmen were to conduct a wreath laying ceremony at Franklin's statue in Lincoln Park.

•

Baltimore

Eight groups, including the Litho Club, joined forces to make the celebration bigger than ever. They were aided by a proclamation issued by Gov. Theodore R. McKeldin. The governor was to be the chief speaker at the P.W. banquet Jan. 17 in the Sheraton-Belvedere.

Milwaukee

The annual Ben Franklin banquet was the highlight, with a record 19 groups participating. Window displays will be seen by thousands during the week, and high school and university group meetings, plant tours, open houses, and a full schedule of radio, TV and newspaper promotions will help to tell the story of Printing Week to thousands of others.

•

San Antonio

A series of programs, using radio and TV, was to precede the big P.W. banquet at the end of the week. A poster contest was sponsored in the schools and printing students were to appear on the TV programs and discuss printing as a career. A bust of Franklin was to be unveiled and dedicated at the central library.

•

Puerto Rico

The observance at San Juan was centered around several TV programs, displays and exhibits of fine printing, and a number of open house programs. Printers and lithographers were scheduled to speak to high school students, emphasizing the advantages of printing as a career.

•

Houston

Lithography Day was to be observed Wednesday, Jan. 18, as part of the local P.W. celebration. Offset shops in all parts of the city were to participate. Other "days" were as follows:

Monday, Letterpress Day; Tuesday, Benjamin Franklin Day; Thursday, Gravure Day; Friday, Silk Screen Day; Saturday, Publishers Day.

•

New York

President Dwight D. Eisenhower was chosen to receive the Franklin Award for Distinguished Service, of the New York Employing Printers Association. It was to be presented at the annual Printing Week Dinner at the Hotel Biltmore Jan. 16. Appearing on behalf of the President to accept the award for him will be Charles E. Wilson, secretary of defense, who will make the principal address of the evening. Another feature of the Printing Week dinner will be an original reading by Charles Laughton, based on the life and writings of Benjamin Franklin.

The New York dinner, principal event of Printing Week, is being sponsored by the New York Employing Printers Association and The Club of Printing House Craftsmen of New York, in cooperation with 60 national and local organizations including Printing Industry of America, International Association of Printing House Craftsmen, International Graphic Arts Education Association, New York Publishers Association, Magazine Publishers Association, Association of National Advertisers, American Association of Advertising Agencies and its New York Council, American Book Publishers Council, and American Institute of Graphic Arts.

Printing Week 1956

Celebrating the 250th anniversary of the birth of Benjamin Franklin

The Honorable Dwight D. Eisenhower
President of the United States
Washington, D. C.

Dear Mr. President:

On January 17, 1956, the people of the United States of America and of the world will mark the 250th anniversary of the birth of Benjamin Franklin.
Patriot, printer, scientist, philosopher, statesman and diplomat, Benjamin Franklin stands today and for all time as an idealization of the human spirit.
On the evening of January 16, in the main ballroom of the Biltmore Hotel in New York City, and, during the week in all principal cities of the country, the Printing Week Committee will sponsor celebrations in honor of the man known to everyone as the American Printer. It will be an occasion dedicated not only to the memory of Franklin but also to the ideals of the free printing press, free speech and free scientific inquiry.
I have the honor to inform you that on this special occasion of the 250th anniversary of the birth of Franklin, you have been designated to receive the Franklin Medal for Distinguished Service. This medal, awarded annually to an outstanding American, bears the legend, "He took the lightning from the sky and the sceptre from the hands of tyrants."
You are respectfully invited to be our guest of honor at the Printing Week Dinner, Monday evening, January 16, 1956.

Respectfully,

The formal document *(see photo)* notifying President Eisenhower that he had been chosen for the award is regarded as an outstanding specimen of the graphic arts, the result of collaboration of artists, typographers and paper makers. The likeness of Franklin on the document is an artist's rendering of the famous Houdon bust, done in fine-line scratchboard technique to simulate the copperplate engraving prevalent in Franklin's day.

The invitation was set in a present day cutting of Baskerville, a type face designed by John Baskerville of England, a friend of Franklin with whom he corresponded frequently. In keeping with Franklin's own philosophy

Laughton

Wilson

is the simple typographic handling throughout. The 19 by 26 invitation was printed in three colors—"Printing Week 1956" in red, the Franklin bust in gray, the type in black—on handmade paper with a natural deckle on all four sides.

•

Four nightly programs by printing buyers, also were on the P.W. schedule. These clinical forums, showing uses of printing in various fields, are to be sponsored by the American Institute of Graphic Arts, House Magazine Institute, Point-of-Purchase Advertising Institute and Direct Mail Advertising Association.

•

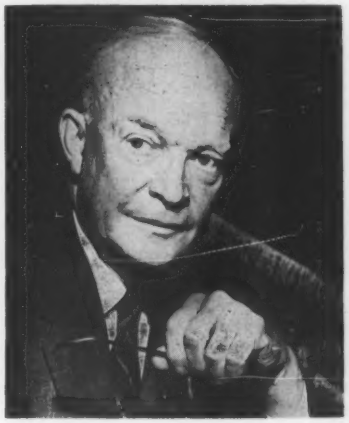
The New York School of Printing was to participate in P.W. activities, sponsoring a series of educational and civic observances. At least one program was on the schedule each day of the week, with many of the programs being held at the school.

•

San Marino, Cal.

The largest and most complex exhibition of Frankliniana ever held in the West was to open at the Henry E. Huntington Library and Art Gallery Jan. 17. Opening date was carefully chosen to coincide with Ben Franklin's 250th birthday and with the

President Eisenhower



observance of Printing Week.

All manuscripts and imprints by and pertaining to Ben Franklin came from the library's expansive archives. The library owns nearly 650 of the 800 existing imprints by the famous printer, diplomat, philanthropist, journalist, scientist, and patron saint of all printers.

Among the interesting exhibits the public was invited to inspect are the following:

Franklin's autobiography in his own handwriting, 1771-78; a 1736 imprint of Poor Richard's Almanac, which made Franklin famous and rich and sold about 10,000 copies; an imprint of "The Religion of Nature Delineated" by William Wollaston — type for this book was set by Franklin when he was 19 years of age and on a visit to London, at the famous London printing house of Palmer; and Cicero's Cato Major or "Discourse of Old Age," 1744. This book is recognized as the finest and most beautiful product of Franklin's press and of all other American 18th century presses.

In the photo, library officials examine one of the Franklin volumes.

•

New Orleans

A pretty little brunette, Miss Judy Bennett, was chosen from a group of beauties for the title of "Miss Printers' Devil of 1956" to reign over the Printing Week in New Orleans. The

contest was staged at the New Orleans Club of Printing House Craftsmen's November meeting. Craftsman Warren Forstall, chairman for the event, made the necessary preparations and conducted the contest and made the awards.

Printing Week in New Orleans is being co-sponsored by the New Orleans Craftsmen Club and the Printing Industry of New Orleans. Ernie Jilek, is Printing Week Chairman.

Los Angeles

The Los Angeles celebration this year will be the first conducted under the auspices and guidance of the newly formed Printing Week Council of Greater Los Angeles, Inc., and biggest in the history of Southern California.

Heading the list of outstanding events was, as usual, the Printing Week Banquet, which again was to be held in the Biltmore Bowl, Jan. 17, where 800 printers, guests and friends assembled last year for the same occasion. Dancing and entertainment will round out the program which is to be highlighted by presentation of the Benjamin Franklin Award.

Many Los Angeles printers were to hold open house during the week, along with college printing departments and suppliers.

Speakers all over the county will address schools, colleges, civic clubs and fraternal organizations to tell the story of the printing industry. Miss Etaoin and Miss Shrdlu, who traditionally reign over Printing Week in Los Angeles are respectively Anne

Fleming and Jenny Lea of Hollywood.

In the photo also, are Dale Magor (l.) and Tim O'Keefe, P.W. co-chairman.

The annual radio and TV luncheon, with leaders of the industry meeting with public service directors, commentators, and other top personnel of local radio and TV was held Jan. 6.

Displays of fine printing will be featured at many local public and college libraries, and a special award for achieving excellence in graphic presentation is being made to the Southern California Industrial Editors Assoc.

Guiding the entire operation is a committee headed by Timothy F. O'Keefe, Sierra Paper Co. Serving with him are Dale Megor, co-chairman, Jeffries Banknote Co.; Bruce

(*Continued on Page* 121)

Holding a copy of "Cato Major," finest product to come off an American press in the 18th century, printed by Benjamin Franklin, are Robert O. Shad, left, curator of rare books at Henry E. Huntington Library and Art Gallery, and Tim O'Keefe, chairman of the 1956 Printing Week Committee. The library opened the exhibit Jan. 17, Franklin's 200th birthday.

Printability: More Science Than Art

by Philip A. Cerasoli

LITHOGRAPHERS and printers have given papermakers no rest in their battle for better printing papers. Demand for high performance characteristics from their paper stock has channelled papermakers' research time and dollars into studies on printability:—how is it measured?—how to pre-determine whether a combination of pulp and chemical additives will produce a good printing sheet—does printability mean the same to all lithographers and printers?

What Is This Printability?

Printability, to render an overall interpretation, is the faculty of paper to perform under printing press conditions in a manner which will result in a quality reproduction—quality reproduction in this instance meaning a true and accurate image of that which is to be printed. There is a tendency to exclude from the definition of printability some of the more important mechanical properties of paper. However, quality reproduction is very difficult unless the mechanical properties of paper are such that the paper will lie and remain flat, will feed properly, etc. during the printing operation. Perhaps the definition should be expanded to encompass all the attributes of paper which are responsible for excellent performance from the moment of feeding to the finished printed product.

Now what of the characteristics which a paper must have to enhance good printability?

A list can readily be drawn up enumerating the most important of these characteristics. The following list does not give the properties in any special order of importance, but does include the major considerations.

1. Ink Receptivity.
2. Pick.
3. Opacity.
4. Moisture Content.
5. Compressibility.
6. Smoothness.

Ink receptivity concerns the ability of paper to receive printing ink. The paper must have an affinity for the ink being used. However, control of ink reception must be exercised if strike-through is to be prevented. Because ink receptivity is such an important attribute, the papermaker produces all printing papers with some degree of ink absorbing properties. Ink flotation, oil penetration, and porosity tests are basic indicators used by the papermaker to indicate and predict ink receptivity. But the problem of correct ink receptivity cannot be solved by the papermaker alone, for, when paper is being manufactured, the papermaker is unaware of the type ink and detailed press conditions to which the paper will be subjected. Generally, papers are not custom-made for varying ink and press conditions. It would not be foolhardy to predict that in the future papermakers will be able to custom-make papers with exactly asked-for penetration qualities. Until that time comes, however, it remains the responsibility of the printer and lithographer to combine paper, press conditions, and ink—with all their separate weaknesses and frailties—into an accomplished finished product.

Pick is an important property, especially so for an offset paper. Cylinder pressures, plate dampening, and ink tackiness are examples of offset printing factors which tend to break down the paper. A good offset paper must of course resist picking. The conventional test is used generally throughout the papermaking industry for want of a better simple control method of measuring pick. Correlation of wax pick test results with actual printing experiences have proved confusing, however. Frequently papers exhibiting low wax pick ratings have printed well without picking. On the other hand, papers with comparatively high wax pick ratings have been guilty of creating problems.

Wax Test Not Whole Answer

Lack of such correlation is great enough to undermine confidence in such testing procedure. But this disagreement between the wax pick test and performance could arise from a misinterpretation of what pick actually is. The lifting off of individual fibers or foreign matter impressed into the surface of the sheet during manufacture (dryer scale, size scale) should not constitute pick. Pick should be construed as a major rupture of either the surface or body of the paper during the printing operation. Pick testers, including the wax test now in use, and new methods

(*Continued on Page* 127)

. . . . *Mr. Cerasoli is Quality Control Superintendent at the Miquon, Pa. plant of W. C. Hamilton & Son.*

Predict Expanded Use for Magnesium In *DRY OFFSET*

A BROAD program of research on applications of magnesium in the graphic arts is being pursued by Dow Chemical Co. at its newly-expanded graphic arts laboratory in Midland, Mich. Working in double the space formerly available, graduate chemists and technical assistants are exploring means of extending the scope and utility of the Dow Etch Process.

Dow has supplied lithographers and printers for years as a secondary marketer of chemicals going into the manufacture of inks, papers and other trade items. Now the Dow Etch Process, first introduced in 1953, has put the company name on the list of direct suppliers to the graphic arts industry. Magnesium had been used as a commercial printing metal for eight years prior to that. As of December 1, 1955, 94 Dow Etch machines were in use in the U. S., Canada and Europe. The process, as used in dry offset lithography, has advanced the art due to its greater speed of plate preparation. Etching depths of 0.010 to 0.014" in the open areas are obtained in three to seven minutes. The magnesium plates are prepared on thin (0.025 or 0.032") wrap-around sheets or on thicker gauges which require plate-curving equipment. The offset press is modified where necessary to accommodate the gauge used. A growing number of standard offset presses are being undercut at the factory for magnesium dry offset plates.

The Process Explained

What happens during the Dow Etch Process is basically this:

Six rows of paddles in the Dow Etch machine agitate an etching bath containing dioctyl sodium sulfosuccinate (a wetting agent), diethylbenzene (a solvent) and nitric acid. A magnesium engraving plate positioned face down in a holder inside the cover is splashed by the fluid.

The wetting agent and solvent immediately form an acid resistant film on the plate surface. The force of the fluid striking the plate combined with the nitric acid dissolves the film selectively. When the fluid strikes the non-image areas, it does so at approximately a 90-degree angle, and there is enough force to break the film and begin etching. When the fluid strikes the image areas, however, it is traveling parallel to them, and there is insufficient force to break the film.

Because the filming action is continuous, a nearly shoulderless sidewall etch results, in contrast to the stair-step shoulders obtained with conventional methods. Magnesium etches more rapidly than zinc, even in half-strength baths. A given amount and concentration of nitric acid dissolves nearly twice as much magnesium as zinc before bath depletion.

Investigations Underway

A one-bath dry offset combination plate etching technique is already

Success of the magnesium plates was described by David Lewis, American Newspaper Publishers Assoc., in his paper on dry offset at TAGA's annual convention last year. "ML" printed Mr. Lewis's paper (July) which had this to say of the Dow process:

It was found that the plates etched by the DOW-ANPA process were infinitely better than those etched by the conventional process. In order to obtain the desired tone range with the particular process, it was necessary to change the negative specifications. In doing this, it was also learned that lower tones could be held during the printing operation due to the additional depth which can be obtained with the use of this particular process.

In view of the excellent work which has been obtained from the DOW-ANPA high speed etched plates, all plates are now being made by this process.

Introduction of the magnesium plate to the dry offset process necessitated the design of a hot bending fixture which would allow magnesium plates to be locked up on a small diameter cylinder with a minimum gutter. The fixture was designed to bend 0.025" magnesium to 90° with a minimum radius of 0.062".

Adaption of the DOW-ANPA etching process eliminated a large percentage of the halftone break; however, the balance of the problem lies with the negative. The inherent nature of the photographic process prevents linear continuous tone copy from being screened such that the resulting negative is also linear. It is our belief that the comparative work now in progress between ANPA Research Institute. Inc., and Fairchild Camera & Instrument Corp. will yield results which will lead to the preparation of an ideal negative.

In conjunction with the ideal negative, there is the "low image loss" feature of the DOW-ANPA etching process. When these two features are put to use, there should be no problems on plate making for dry offset.

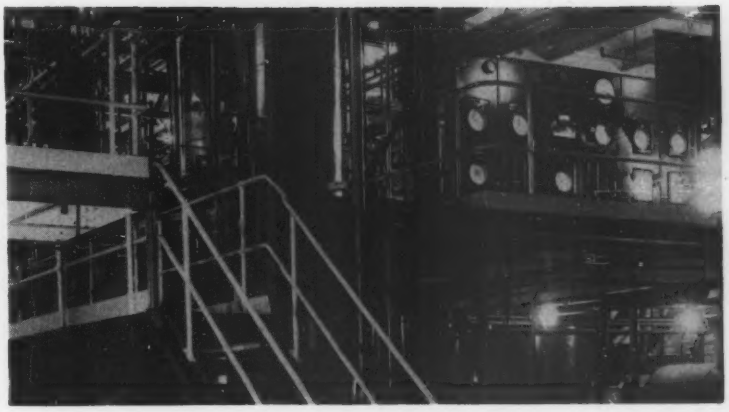
being used, new photo resists, roll-up inks and deep etch techniques are being studied, and investigations are in progress on soldering, plate curving and the use of electro-deposits such as chromium to improve the wear resistance of engraved plates.

Dow researchers are co-operating with the American Newspaper Publishers Association Research Institute, Inc. in a program to perfect dry offset. The new Graphic Arts Laboratory has three separate rooms, two for research and photoprinting, and the third for demonstrating the Dow Etch Process. Equipment includes two-standard-size (130-liter) Dow Etch machines in which plates up to 24 by 26 inches can be handled, and an intermediate-size (60-liter) machine capable of accommodating plates up to 15 by 18 inches. A recent addition is a miniature model etching machine with a five-liter capacity that allows study of many chemicals now available only in small quantities. The laboratory also has complete photoprinting facilities and microscopes for examining etched plates.

Other Products from Dow

Five other Dow products—glycols, Dowanols[R], Dowtherms[R], bisphenol A, p-tert-butylphenol—are also used in the manufacture of printing inks.

Glycols are used chiefly as resin solvents in vapor-set or steam-set inks, but they also are used as intermediates in producing certain ink resins. Propylene glycol and triethylene glycol, because of their lack of odor and low toxicity, find application in inks which are to be used on food wraps. Dowanols are used primarily in aniline type inks.★



(Top) A standard-size Dow Etch machine in operation in the Company's new graphic arts laboratory. Technician is adjusting experimental combination (line and halftone) plate in holder.

(Center) Magnesium dry offset plate produced by high-speed Dow Etch Process. Printing areas are in relief while non-printing areas have been etched away. Thinness of plate (0.025 inch) permits easy wrapping around offset press cylinder.

(bottom) Maze of piping and electronic controls is the glycol plant at Midland, Mich.

How YOU Can Budget
HOURLY COSTS

Reprinted from "A Study of a Simplified Method for Building Budgeted Hourly Cost Rates in a Lithographic Plant," by **Frank R. Turner, Jr.**, cost accountant, and **Walter E. Soderstrom,** executive vice president, National Association of Photo-Lithographers. The 56-page booklet was revised Nov. 1, 1955 by NAPL.

THE first requisite of good management is that of establishing sound departmental hourly costs. It is easy to obtain and use hourly costs or a price list used by a competitor, but when the new plant owner operates on this basis, he never knows whether he is right or wrong. A competitor's price list or hourly costs may have been figured for equipment quite different from that used by the new plant owner. In fact, he may have picked up his data from some competitor and put it in use without reference to costs in a specific plant.

In the thought that this kind of information would be of value both to those who are planning to install, and those who are operating lithographic equipment, we have outlined this procedure for setting up lithographic departmental hourly costs. This pro forma study is complete enough so that the reader can set up his own schedules supported by his particular costs.

CHART A

Let us assume that our lithographic plant will contain the following equipment:

1. Camera — 24" complete with lens, screen, arc lamps, darkroom, sinks, etc.	$ 9,500.00
2. Stripping Tables	400.00
3. Opaquing Tables	400.00
4. Vacuum Frame, Whirler, Developing Sink, etc.	5,500.00
5. Two lithographic presses, 17½" x 22½"	29,300.00
6. One lithographic press, 23" x 36"	26,300.00
7. One paper cutter, 39"	6,850.00
Total Investment in Machinery and Equipment	$78,150.00

There is a divergence of opinion as to the life expectancy of lithographic equipment. Depreciation rates should be determined in the light of such considerations as 1. how hard the equipment will be used, 2. how well it is to be cared for and 3. whether technological improvements and early obsolescence may warrant heavier annual write-offs than normal. In this study we have used a depreciation rate of 7½ percent per annum.

The floor space necessary depends on the kind of product to be manufactured, whether the rent is high or low, etc. It is suggested that in figuring floor space, some tolerance be included in the computations. Better a little too much, than much too little.

Insurance in the schedules shown herewith has been figured on a rate of $3 per thousand dollars of investment in the plant's machinery and equipment.

Rent varies from city to city and in this study we have used an arbitrary rate of one dollar per square foot.

Direct supplies in this study include those supplies purchased by a lithographer for general use which are not recovered as such in the estimate when figuring a job for the customer. Some lithographers who sell from a predetermined price list include in their prices such items as plates, film, ink, etc., whereas other lithographers who sell on a job basis throughout the year recover for these costs in the estimate for each job.

CHART D

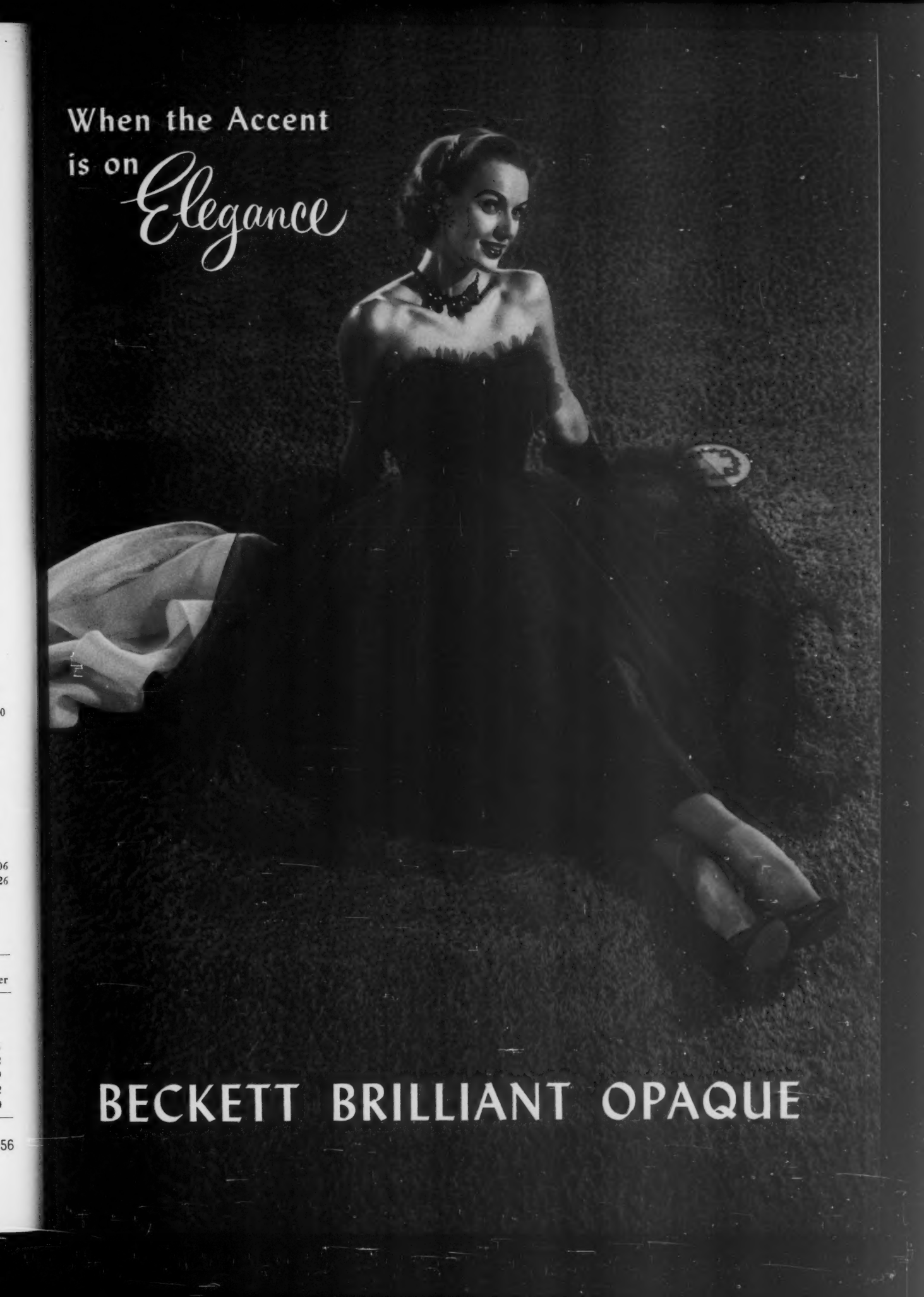
Chart D shows items of expense common to the operation of any normal business. The arbitrary figures selected as administrative and selling expenses are considered conservative.

ADMINISTRATIVE EXPENSE:		
Auditing	$ 175	
Auto Supplies and Expenses—General Office	425	
Bad Debts	125	
Collection Expense	150	
Contributions	350	
Convention Expense	325	
Depreciation—Office Equipment	70	
Dues to Trade Associations	300	
Insurance other than Factory	80	
Legal Expense	175	
Miscellaneous Office Expense	525	
Office Supplies	450	
Postage	400	
Rent Office (1000 sq. ft.)	1,000	
Salaries — Executive	10,000	
Salaries of Office Help, Estimator, Order Writer, Stenographer	9,700	
Taxes—Corporate	60	
Taxes—Social Security, O.A.B. and Unemp.	725	
Telephone and Telegrams	425	
Traveling Expense	360	
Total Administrative Expenses		$25,820
SELLING EXPENSE:		
Advertising	$ 400	
Auto Supplies and Expenses—Salesmen	350	
Commissions and Salaries—Salesmen	10,000	
Convention Expense—Salesmen	256	
Insurance	150	
Rent Sales Office—500 sq. ft.	500	
Taxes—Social Security, O.A.B. and Unemp.	500	
Traveling Expenses	850	
Total Selling Expenses		$13,006
Total Administrative and Selling Expenses		$38,826

CHART E

Chart E illustrates one scheme for budgeting the costs of manufacture

Cost Center	Mfg. Exp.	Application Per Cent	Application to Cost Center
Camera Dept.	$ 9,293.98	11.97	$ 4,646.98
Stripping Dept.	7,604.94	9.79	3,802.46
Opaquing Dept.	6,756.57	8.70	3,378.27
Platemaking Dept.	9,683.76	12.47	4,841.86
Two 17 x 22 Presses	18,828.68	24.25	9,414.32
One 22 x 34 Press	17,763.62	22.88	8,881.79
Cutting Dept.	7,720.65	9.94	3,860.32
	$77,652.20	100.00	$38,826.00


When the Accent
is on Elegance
BECKETT BRILLIANT OPAQUE

Note to Quality-Minded Printers, Advertisers and Agencies

THE TREND in offset lithography is to the use of premium-quality paper for direct-mail material of all types.

Pace-setter in this trend is the sheet on which this insert is printed. Because its super-whiteness is matched by its super-opacity, in most printed productions one weight lighter of Beckett Brilliant Opaque than run-of-mill offset paper is indicated.

Many leading printers now stock Beckett Brilliant Opaque. Many agencies and national advertisers have adopted it as a standard specification for all their direct-mail productions.

Try it on your next job. Or, make a split run with Beckett Brilliant Opaque and any standard offset paper, and you'll get a convincing demonstration of the superior printability of this famous super-quality grade.

Beckett Brilliant Opaque is surface-sized. In addition to Vellum, it is supplied in Halftone and a variety of embossed finishes; in 5 book paper weights—50, 60, 70, 80 and 100 lb. and in 4 cover paper weights—50, 65, 80 lb. and double thick. A request to your paper merchant or to us will bring samples to your desk.

THE BECKETT PAPER COMPANY, HAMILTON, OHIO

Makers of Buckeye Cover, Duplex Buckeye Cover, Beckett Cover, Spanish Grain Duplex Cover, Beckett Brilliant Opaque Cover, Beckett Text Cover, Buckeye Text, Beckett Text, Beckett Tweed Text, Beckett Vellum, Beckett Offset, Beckett Brilliant Opaque, Beckett Hi-White, Greetings, Announcements, Writings and Specialties.

THIS IS BECKETT BRILLIANT OPAQUE, CORAL FINISH, 80 LB.

ILLUSTRATION COURTESY WUNDA WEVE CARPETS

CHART C BUDGETED HOURLY COST OF OPERATING A SMALL LITHOGRAPHIC PLANT ON A SINGLE SHIFT BASIS
TWO PRESSES 17-1/2 x 22-1/2—ONE PRESS 23 x 36

Line No.		Camera 24" Mach. Hr.	Stripping B. & W. Man Hr.	Opaquing Man Hr.	Plate-making Mach. Hr.	2 Presses 17-1/2x22-1/2 Mach. Hr.	1 Press 23 x 36 Mach. Hr.	Cutter 39" Mach. Hr.	TOTALS
1.	Investment in Cost Center	$ 9,500.00	$ 400.00	$ 400.00	$ 5,500.00	$29,300.00	$26,200.00	$ 6,850.00	$ 78,150.00
2.	Rate of Depreciation	7-1/2%	7-1/2%	7-1/2%	7-1/2%	7-1/2%	7-1/2%	7-1/2%	
3.	Floor Space—Sq. ft.	800	60	60	500	400	400	150	2,370
4.	Total Wattage of Arc Lamps	2,000	-	-	3,850	-	-	-	-
5.	Total Horsepower of Motors	.2	-	-	1/2	8	6	2	-
	FIXED CHARGES (NON-VARIABLE)								
6.	Depreciation	$ 712.50	$ 30.00	$ 30.00	$ 412.50	$ 2,197.50	$ 1,965.00	$ 513.75	$ 5,861.25
7.	Rent (rate per sq. ft.—$1.00)	800.00	60.00	60.00	500.00	400.00	400.00	150.00	2,370.00
8.	Fire and Sprinkler Insur. (rate $3.00 per M)	28.50	1.20	1.20	16.50	87.90	78.60	20.55	234.45
	VARIABLE CHARGES								
9.	Payroll (direct labor only)	5,104.32	5,314.40	4,664.40	5,314.40	10,208.64	9,877.40	4,813.64	45,297.20
10.	Indirect Labor (Supervision and Miscellaneous—15%)	765.65	797.16	699.66	797.16	1,531.30	1,481.61	722.05	6,794.59
11.	Welfare Benefits ($4.50 per man per week)	234.00	234.00	234.00	234.00	468.00	468.00	234.00	2,106.00
12.	Payroll Taxes (Soc. Sec. and Unemploy. Insur.—5.0%)	248.28	249.86	244.98	249.86	496.56	494.08	246.10	2,229.72
13.	Workmen's Comp. Ins. (rate $14 per M)	82.18	83.96	75.10	83.96	164.36	152.53	77.50	719.59
14.	Light, Heat and Power (rate $.03 per KWH)	63.64	15.00	15.00	125.04	176.72	132.53	44.18	572.11
15.	Direct Supplies	220.00	120.00	110.00	960.00	800.00	575.00	60.00	2,845.00
16.	Repairs to Equipment (2% of Investment)	190.00	8.00	8.00	110.00	586.00	524.00	137.00	1,563.00
17.	Subtotal	8,449.07	6,913.58	6,142.34	8,803.42	17,116.98	16,148.75	7,018.77	70,592.91
18.	General Factory Expenses (10%)	844.91	691.36	614.23	880.34	1,711.70	1,614.87	701.88	7,059.29
19.	TOTAL MANUFACTURING COSTS	9,293.98	7,604.94	6,756.57	9,683.76	18,828.68	17,763.62	7,720.65	77,652.20
20.	Administrative and Selling Overhead (50%)	4,646.98	3,802.46	3,378.27	4,841.86	9,414.32	8,881.79	3,860.32	38,826.00
21.	TOTAL COSTS	$13,940.96	$11,407.40	$10,134.84	$14,525.62	$28,243.00	$26,645.41	$11,580.97	$116,478.20
22.	Manufacturing costs per productive hour, based on an operating activity of:								
	85%—35 Hour Week—1398 Hours	$ 6.65	$ 5.44	$ 4.83	$ 6.93	$ 6.73	$ 12.71	$ 5.52	
	75%— " " " —1234 "	7.53	6.16	5.48	7.85	7.63	14.40	6.26	
	60%— " " " — 987 "	9.42	7.71	6.85	9.81	9.54	18.00	7.82	
23.	All inclusive costs per productive hour, based on an operating activity of:								
	85%—35 Hour Week—1398 Hours	9.97	8.16	7.25	10.39	10.10	19.06	8.28	
	75%— " " " —1234 "	11.30	9.24	8.21	11.77	11.44	21.59	9.38	
	60%— " " " — 987 "	14.12	11.56	10.27	14.72	14.31	27.00	11.73	

(In determining hourly cost rates on the 17-1/2 x 22-1/2 presses, the hours listed in lines 22 and 23 above have been doubled.)

CHART F

Chart F shows how to determine actual productive hours in a specific department

		Hours
35 Hours x 52 Weeks		1,820
Less: 3 Weeks Vacation	105	
10 Paid Holidays Not Worked	70	175
Hours Worked		1,645
Number of Productive Hours—85%		1,398
" " " " —75%		1,234
" " " —60%		987

Some of the direct supplies included in this study are:

CAMERA DEPARTMENT:

Carbon-Arcs, Chemicals, Filters, Sponges and Cheese Cloth

STRIPPING DEPARTMENT:

Goldenrod Masking Paper, Scotch Tape and Knives

OPAQUING DEPARTMENT:

Opaque, Brushes, Needles and Cotton

PLATEMAKING DEPARTMENT:

Chemicals, Developing Ink, Carbon-Arcs, Cheese Cloth, Cotton and Brushes

PRESSES:

Blankets, Rollers, Molleton, Chemicals, Oils and Rags

CUTTING DEPARTMENT:

Cutting Sticks, Grinding Knives and Grease and Oil.

Under repairs we have budgeted a very conservative dollar figure.

The largest item in our computation is that of direct labor. Skilled craftsmen in the lithographic industry are extremely scarce. In large lithographic centers many of them receive premium wages.

CHART B

	Per Week	*Per Year*
Camerman	$ 98.16	$ 5,104.32
Stripper	102.20	5,314.40
Opaquer	89.70	4,664.40
Platemaker	102.20	5,314.40
Two Pressmen—17" x 22"	196.32	10,208.64
One Pressman—22" x 34"	108.92	5,663.84
One Operator—22" x 34"	81.03	4,213.56
Cutter—39"	92.57	4,813.64
	$871.10	$45,297.20

Lithography is a chemical process and the soundest investment the new plant owner can make is that of securing the most skilled workmen available. In this study, we have listed the minimum wage scale paid union craftsmen in the New York area, covering the period from May 1, 1954 to April 30, 1956. The complement of help on a 17" x 22" press is one pressman, on a 22" x 34" press, one pressman and one operator. These wages will be high or low depending on the skilled help available and the wage picture of a particular area. (See Chart B.)

Supervision or indirect wages in this study covers principally one item, the cost of a working foreman at $6,200.00 per year. We have distributed supervisory payroll over the departments set up on the basis of 15 percent of the direct labor payroll.

Old Age Benefit and Unemployment Insurance costs vary, depending on the taxes in the state in which a plant is located. Since we have set up our plant in New York, Federal and State taxes on this item are 5.0 percent. The five per cent O.A.B. and Unemployment Insurance cost has been figured on the first $4,200.00 of each employee's wages in the department concerned.

In New York the rate of 5 percent for payroll taxes is broken down as follows:

2.7% New York State Unemployment Insurance—Subject after 3 years to merit rate reductions
2.0% Federal Old Age Benefits
.3% Federal Unemployment Insurance
5.0% Total

For our calculations we have used a rate of 5 percent per annum on wages up to $4,200.00 per annum with the thought in mind that even though part of the above taxes apply only up to $3,000.00 per annum this small excess will provide a cushion for possible changes in help.

You can readily determine your state payroll percentage by reference to your quarterly payroll tax returns.

Health and Accident Insurance of $4.50 per employe per week for all lithographic workers is provided for in union plants operating in the New York area. No doubt many employers, whether they have open or union shops, have some such insurance cost.

Compensation insurance at the rate of $14 per thousand of mechanical payroll has been distributed over our operating departments in this computation.

General factory expense includes such items as general supplies, porters, and floor boys, unallocated aisle space, research and development, miscellaneous carpentering, painting, plumbing, electrical work, first aid supplies, etc. These costs have been distributed on the basis of 10 per cent of the departmental costs.

Administrative and selling overhead includes those items of office, sales and executive expense normal to the operation of every business. It should be noted that the proportion of administrative and selling overhead to manufacturing cost will vary considerably in different plants, depending on relative size of the plant and the efficiency with which it is operated. Large plants can spread their administrative and selling overhead over many presses, whereas a small plant with one or two presses does not have this advantage and therefore usually has a higher administrative and selling overhead than does the large plant. We have set up very conservative figures in the administrative and selling expense for this small plant. (See Chart D.)

The total manufacturing cost in the plant we have set up is $77,652.20 and the total administrative and selling overhead cost is $38,826.00. This gives us the following ratio for distributing administrative and selling overhead cost to manufacturing cost:

$$\frac{\text{Adm. \& Sell. O. Cost}}{\text{Manufacturing Cost}} = \frac{\$38,826.00}{\$77,652.20} = 50\%$$

At this point we have gathered the items necessary to set up a budget showing the cost of operating each department for a one-year period. We can now easily secure an approximation of our manufacturing and all-inclusive costs

(*Continued on Page* 120)

Kodak

News for Photolithographers

Here's what we mean by "SUPER"

You wanted it better...
so we made it
10 ways better!
Now, Kodalith Super Ortho Film with a new emulsion is the answer to your requests for:
1 More development latitude
Kodalith Super Ortho Film will yield good negatives through a long development time range for a given exposure.
2 More exposure tolerance
You can now save wasted man-hours, because Kodalith Super Ortho has amazingly wide exposure latitude.
3 Better line reproduction
Kodalith Super Ortho has the high resolution and full Ortho sensitivity which you need for high-quality lithographic platemaking.
4 More abrasion resistance
Much more freedom from annoying marks caused by pre-exposure handling, pressure sensitization, and processing.
5 More safelight tolerance
Super Ortho does not fog easily, even with doubtful safelights.
6 Emulsion transparency
During and after development, a completely transparent non-image area makes careful visual inspection easier.
7 Bleaker images
For easier inspection and better dot etching, Kodalith Super Ortho has the image color which everyone wants.
8 Improved dot etching
Ever have the dot gray out just at the crucial moment? Super Ortho is the answer to the demands of skilled dot etchers.
9 Fewer pinholes
Whatever the source—handling or chemicals—you can greatly reduce pinhole miseries with Super Ortho.
10 Optical clarity
The Kodalith Super Ortho emulsion is coated on an acetate base of unexcelled quality and clarity.
Ten ways better, Kodalith Super Ortho Film offers you new quality, new efficiency, and a new high in satisfaction. And, as always, you can count on Kodak uniformity . . . every box is true to specification.
Next time you see your Kodak Graphic Arts dealer, get a sample of the new Kodalith Super Ortho Film. You'll notice the difference immediately.
Graphic Reproduction Sales Division
EASTMAN KODAK COMPANY, Rochester 4, N. Y.
Kodak

About a year ago, the ad reproduced at the right was run telling about Kodalith Super Ortho Film. "10 ways better," it says, and, if you've tried it, you know!

These ten improvements came from the comments and needs of lithographers just like yourself. *You* told us what you wanted, and then we did our best to give it to you.

Apparently we did all right. Because the trade reaction to Super Ortho has been exciting—especially in regard to its development characteristics.

So, if you haven't done so, try Kodalith Super Ortho soon. You'll see what we mean. Appraise it as critically as you would the first plate from a new man. In the testing lab it does all we say it will. It will do the same in your shop.

This ad stands 60 picas tall

If you were to take a piece of Kodalith Ortho P.B. Film this long and subject it to a temperature change of 20-25 degrees, or a relative humidity change of 30-40 percent, it would vary by only 6/100 of a pica!

Only one part in 1000—finer than the finest line on this page—that's the stability you can enjoy from the .005 polystyrene base of this film. *That's* why—when you want a great deal of handling ease with a minimum sacrifice in size holding—you can count on Ortho P.B. to fill your need.

Its clear, flexible base makes it as easy to handle as Kodalith Ortho Type 2, and has the same fine emulsion. Kodalith Ortho P.B. Film comes in a wide range of cut sizes, too—and because of the booming acceptance of this film, its price has just been reduced! Try it yourself!

A modest suggestion

Half our job is putting a lot *into* our materials. The other half is helping you get a lot *out* of them. So, if you want to produce consistent high-standard work with the least trouble and the most profit, we suggest you *standardize* on Kodak materials. They are **made together to work together** for the results you want. And you can count on them to be the same and work the same whenever and wherever you use them.

Graphic Reproduction Sales Division • EASTMAN KODAK COMPANY, ROCHESTER 4, N. Y.

ANOTHER

first

FOR LANSTON

now available for early delivery,

this low priced, accurate, easily operated, new

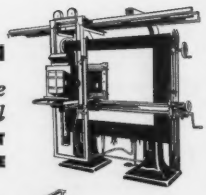
STEP AND REPEAT MACHINE...

the *Magnastep*

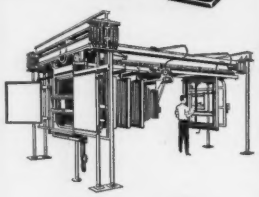
At savings up to several thousands of dollars, you can now have a practical STEP AND REPEAT machine which is both accurate and fast. With only one negative per color, you will find it more economical to fill up the plate than to make extra press runs. Plates to the size of 30″ x 41″ may be used.

Controlled entirely from the front, MAGNASTEP saves time because even the arc light is operated from the front control panel. Steel rules and film bar are held securely in place by the magnetic base, allowing negative to be positioned to hairline accuracy. Vacuum frame holds negative firmly and adjustable curtains eliminate use of layout sheets.

LANSTON *first with the M-H Vertical* **STEP AND REPEAT MACHINE**



LANSTON *first with the M-H Overhead* **COLOR-PRECISION CAMERA**



LANSTON *first with the M-H Vertical* **PLATE-COATING MACHINE**

SEND COUPON FOR FOLDER FULLY DESCRIBING THE NEW LANSTON MAGNASTEP

LANSTON MONOTYPE MACHINE CO.
24th and Locust Sts., Phila. 3, Pa.

Gentlemen:

Please send me Folder No. A-301, describing the advantages of the new Step and Repeat Lanston MAGNASTEP.

NAME_____

FIRM NAME_____

ADDRESS_____

CITY & STATE_____

Lanston *monotype machine company*

24TH AND LOCUST STS., PHILADELPHIA 3, PA.

BRANCH OFFICES: 80 Federal St., Boston 10, Mass. • 216 West Jackson Blvd., Chicago 6, Ill. Room 332, Healey Bldg., 57 Forsyth St., Atlanta 3, Ga. • 441 Lexington Ave., New York 17, N.Y. 115 New Montgomery St., San Francisco, Calif.
IN CANADA: Monotype Company of Canada, Ltd., 77 York St., Toronto 1, Ontario
ALSO REPRESENTED BY: Roberts & Porter, Inc., 622 Greenwich St., New York 14, N.Y. A.E. Heinsohn, Inc., 1443 Blake St., Denver, Colorado

Type set in faces of Monotype Century Schoolbook and 20th Century Series

Technical SECTION

Lithographic Dampening Devices - Since 1884

By W. H. Wood
Harris-Seybold Co.

Lithographers have been experimenting with plate dampening mechanisms and systems for a long, long time. The article starts with a patent issued for a molleton dampener in 1884 and brings the subject up to date, including the latest development by Harris-Seybold. It is taken from a talk given by the author at the 7th Annual TAGA meeting in Boston May 9-10, 1955. He approaches the subject from the standpoint of contact and non-contact systems. Required and desirable characteristics of a dampening device are offered by Mr. Wood

THE lithographic printing process requires the image areas on the plate to be hydrophobic and oleophilic and the non-printing areas to be hydrophilic and oleophobic. Other things being equal, the nearer these conditions are realized, the better the resulting print. Since Senefelder's day some mechanism has been required to deliver moisture to the non-printing portions of a stone or plate so as to maintain the surface in a hydrophilic and oleophobic condition. A short review of selected systems grouped under contact and non-contact types, follows:

Contact Systems

1. A conventional molleton dampening system is used on a majority of offset lithographic presses throughout the world. Possibly it had its beginning in the latter half of the nineteenth century; at least a patent issued to E. Jaeck in 1884 (U. S. Patent 298,092) for dampening a lithographic stone resembles dampening systems now in use.

2. The wick or sponge system patented by Cooper in 1868, was an automatic device for dampening litho stones. The flow of dampening fluid contained in a reservoir to swab applicators was controlled by thumbscrew clamps to feed desired amounts of fluid across a stone plate surface. It was a forerunner of many later similar devices.

3. In 1934, J. Schultz invented another wick-fed device, using single or multiple wick feeds to deliver dampening fluid to the plate. Such applicators would, in time, pick up ink and become erratic in moisture supply. The friction of wicks on plates would not be helpful in increasing plate life, and elongation of dots would probably take place. One desirable feature might be the possibility of adjusting the moisture supply across the plate.

4. In 1935, J. Schultz invented a device for dampening the pan roll on a lithographic press which utilized individual spray heads across the width of the roll. Spray heads are difficult to keep in adjustment and they generally provide far more moisture than is needed to keep a lithographic plate clean. The desirable feature in the particular device could be the possibility of lateral adjustment of moisture feed to the dampening rolls.

5. In 1936, J. Schultz made an improvement in his device, providing a better control of the moisture feed by the wick, and in addition adding smoothing rolls to help in the distribution of moisture.

6. A device invented by B. D. Stevens in 1937, consisted of controllable air jets blowing through a porous belt delivering greater or lesser amounts of dampening fluid to a roll of a dampening system. It is likely that such a device would be easier to adjust than spray nozzles of the usual type, but in any case the results would be little different from the ordinary covered pan roll. It is not clear, moreover, whether there would be any saving of space over a conventional dampener. As with other similar devices, lateral adjustment of the moisture might be the main desirable feature.

7. An early device invented by J. G. Goedike in 1938 fed moisture directly into the ink supply or into the inking system of a press. It was the predeces-

sor of several later devices. In one of these, by feeding water into the ink, an emulsion was formed, and according to theory, the water or dampening fluid phase from this ink emulsion was supposed to be preferentially attracted to and held by the hydrophilic nonprinting portions of the lithographic plate, while the ink phase was attracted to the oleophilic image areas of the plate.

8. In 1939, W. F. Huck invented a moisture distributing mechanism which was a porous roll designed to supply controlled amounts of water to various portions of the roll. The porous roll could contact the plate directly or through a more or less conventional molleton system. Similar devices seem to occur perennially in the patent literature, and if all features are working correctly, such devices would have some merit. Except for the pumping system they would be space-saving, a very desirable feature. The principal problems would be clogging of the pores, pipes, pumping system adjustment and the like.

9. In 1941, H. E. Golber patented a system for lateral control of moisture to a conventional dampener which utilized a mechanism for adjustment of a series of spigots which dropped water on a metallic dampener intermediate roll. Most of the comments applying to the porous roll probably apply here also.

10. An invention of J. G. Goedike, in 1944, was designed to add water to the ink supply by means of rolls in place of the through feed. Our personal experience with an early model of this device was that it worked excellently for a few thousand sheets until the ink became so badly emulsified that it tended to fly off the ink rolls and of course, the work became progressively poorer in color quality. An air blast or infrared system for removing the excess water did not solve the problem sufficiently to make the process practical for every day use.

11. In 1952, M. Ras invented a water atomizing device for the purpose of dampening an intermediate roll which contacted normal molletons. It is probable that this device would be no more effective than other spray systems and perhaps would be more difficult to adjust and maintain.

Pre-emulsified ink might be mentioned in this connection, although it is not a device. One such ink was patented by Addressograph-multigraph in 1937 (U. S. Patent 2,090,-704).

Non-Contact Systems

1. W. B. Pitkin, in 1920, invented a dampening device which supplies steam to the plate cylinder and the plate surface for keeping the nonprinting portions moist. Such steam, of course, would condense on the image areas as well and unless heat were removed from the cylinder by cooling, the plate and plate cylinder soon would attain the temperature of the steam and condensation would cease. It is not hard to visualize the difficulties with softening ink films on the printing image with consequent smearing and scumming on the plate.

2. Starting in 1935, a number of patents were issued to several inventors on devices for dampening lithographic plates by moisture condensation on chilled cylinders. The first one of these was issued to C. W. Harrold in 1935. It provided for a chilled cylinder and means for cooling this cylinder, and for a supply of water vapor laden air, or steam, to be applied to the lithographic plate tangentially; the moisture condenses on the plate surface.

3. A somewhat similar system was invented by J. G. Goedike in 1935. This presumably condensed moisture from the air after the plate cylinder had been sufficiently cooled.

4. In 1936, M. B. Goddard patented a device that was somewhat similar to the Harrold mechanism, providing for a refrigerated plate cylinder and vapor laden air or fog to be applied to the plate tangentially.

5. In 1936, B. D. Stevens patented a mechanism almost indistinguishable from the previous devices.

6. In 1940, K. C. Gremecki patented a device which generated fog or spray laterally across the plate and applied it by means of blowers, fans, or the like, through ducts to the plate surface. Moisture was applied over the ink image as well as to the nonprinting portions and, as will be pointed out in a later paragraph, the printing suffered difficulties common to such a device.

7. In 1951, H. E. Marsden invented a spray nozzle system which applied moisture directly to the plate surface. Results would presumably be similar to the Gremecki device.

8. In 1952, W. G. Mullen patented the water film method of dampening whereby a water film is maintained between a dampening roller set at about .004″ from the plate, applying moisture over the entire plate surface and then taking off the excess by means of an air doctor blade or air knife and a suction arrangement. It may be difficult to keep the various components clean and considerable power for air pumps is required.

9. In 1952, Hauser and Wagner conceived a device whereby an air jet is blown through a screen which is holding a liquid film in the screen interstices, the air stream breaking up the water into small droplets which are blown onto the plate surface. The screen may be either an oscillatory vertical screen or a rotary screen. So far as printing is concerned, the results would be similar to most of the other spray devices spraying directly on the plate, and subject to many of their difficulties.

10. The last device of the noncontact type was invented by Wood and Pritchard of the Harris-Seybold Company and in one of its forms it provides for a fog generator and a wire maintained at negative or positive high potential by a direct current source. Fog particles pick up a charge and are directed at fairly high velocities to a plate surface. Because the particles are charged, they go directly to the plate surface (ground) and there is little glancing off as is the case with many other fog or spray devices. Even so, some means of removing stray toxic spray particles would be required.

From the previous descriptions we can see that many people have worked on devices for dampening lithographic plates. To date all of them have been deficient in one or more characteristics. Through the work of PATRA and LTF it has been found that print-

ing quality is altered radically by moisture residing on the ink surface, the effect being more pronounced than emulsified water, or dampening fluid, in the ink.

In order that other investigators may be helped in working out a satisfactory dampening system for a lithographic press we have listed required and desirable characteristics which such a dampening system should have. These characteristics are as follows:

Required Characteristics:
The System or Device:

1. Must supply the optimum quantity of dampening fluid to the non-printing parts of the plate by:
   - A. Applying the dampening fluid across the width of the plate, uniformly or variably without forming droplets or streak patterns.
   - B. Being adjustable to feed lesser or greater quantities to the entire plate surface.
   - C. Being adjustable to provide differences in the quantity of dampening fluid in vertical bands around the periphery of the plate cylinder covered by the plate.
   - D. Avoiding to the greatest possible extent, the application of dampening fluid to the printing areas.
   - E. Providing moisture regulated to some extent by demand of local areas and being able to remove excess dampening fluid particularly as it may reside on the printing areas.
   - F. Being versatile enough to dampen plates for satisfactory printing with any present day litho ink regardless of vehicle or pigment used.
2. Must maintain correct setting for optimum results.
3. Must not affect the plate mechanically (elongating dots, burnishing plates, etc.).
4. Must be easy to service (clean and maintain).
5. Must not be prohibitive in price or cost of operation and maintenance.
6. Must be adaptable to present press

(*Continued on Page* 120)

Technical BRIEFS

Abstracts of Current Literature in the Graphic Arts

These abstracts of important current articles, patents, and books are compiled as a service of the Lithographic Technical Foundation, Inc. They represent statements made by the authors and do not express the opinions of the abstractors or of the LTF.

Since some of the abstracts are from abstract journals, LTF cannot furnish photostats of all of the original articles. If the title is marked with an asterisk, LTF has no further information than that contained in the abstract itself. Inquiries about these items should be sent direct to the source that is named. If you want copies of U. S. Patents, write direct to the Commissioner of Patents, Washington 25, D. C. Send twenty-five cents for each patent desired. Make checks or money orders payable to "Treasurer of the U.S."

If the title of the abstract is not marked with an asterisk, LTF can supply photostats of the original article. The charge is sixty cents per page plus six cents postage. Orders from companies or individuals who are not members of LTF cannot be filled until payment is received. Orders with payment enclosed received immediate attention.

Foreign patents may be obtained as photostats from the Library of Congress, Washington, D. C.

LTF also has mimeographed lists of (1) "Periodicals Abstracted by the Research Department" and (2) "Books of Interest to Lithographers." These are available for ten cents each in coin or U. S. stamps. Lithographic Technical Foundation, 1800 S. Prairie Ave., Chicago 16, Ill.

Photography, Tone and Color Correction

How To Make Screen Tints (Part 2). Stanley R. Goldsmith. *American Printer and Lithographer* 136, No. 8, August, 1955, Page 32 (1 page). The author continues his discussion of the requirements needed to make good screen tints. The lens illumination and developing techniques are reviewed. An analysis of some of the common faults in screen tints is given.

Process Lenses, Facts and Care (Part 2). Herber P. Paschel. *Gravure* 1, No. 7, July, 1955, pp. 31-32 (2 pages). Process lenses will last indefinitely if handled with care. Avoid subjecting lenses to chemical fumes, or a dusty atmosphere. Avoid extremes in temperature. Cleaning should be kept to a minimum but when necessary extreme care should be exercised. Don't use ammonia as a cleaner and don't apply pressure when polishing the lens with tissues.

Colour-Masking In Graphic Arts Reproduction. Frank H. Smith. *Science and Applications of Photography, Proceedings of the R.P.S. Centenary Conference, London, 1953.* The Royal Photographic Society of Great Britain, Publishers, 1955, pp. 543-547 (5 pages). Theoretical considerations: the effect of filter colours compared with that of the printing colours. Hand and photographic colour correction. Contact masking and the limitations of the method. Masking by projection. Subtractive and additive applications. Additive correction of tri-colour separations. Correction of four-colour separations. Correction for four-colour letterpress "wet" printing. The "black printer" for four-colour reproduction.

Practical Applications of Photographic Masking. R. Conrad. *Science and Applications of Photography, Proceedings of the R.P.S. Centenary Conference, London, 1953.* The Royal Photographic Society of Great Britain, Publishers, 1955, pp. 547-552 (6 pages). It will be shown that masking has much wider possibilities than purely the colour correction of originals to be reproduced. Given an instrument which guarantees perfect re-registration of all photographic records, masking can be applied for many tasks which up to now are difficult or even impossible to achieve, e. g., making photo-composites of various coloured originals to any given layout, screened or unscreened, including colour correction; inserting lettering in colour into colour films directly on the corrected screen negative; saving painting-out of originals with difficult outlines or line-and-tone character; under colour removal for wet printing, etc. It will be shown that these new ideas of applying masking have proved very successful in improving the quality of the reproduction, and at the same time the saving of retouching time is very considerable.

The Variation of Granularity With

"For fixing capacity and speed... **Hunt FLASH-O-GRAPH Fixer** *beats them all!"*

NEW CONVENIENT PACKING

Each carton of Hunt FLASH-O-GRAPH Fixer contains four 1-gallon jugs of Fixer, four 12-ounce bottles of FLASH-O-GRAPH Hardener, and two measuring graduates.

Reports like this come in almost daily from photographers who are fixing *more* film and *more* prints with Hunt FLASH-O-GRAPH Fixer than they've ever done with any other fixer.

They get fixing *speed* as well. With Hunt FLASH-O-GRAPH, photo-mechanical film clears in less than 20 seconds; commercial pan film in less than 50 seconds; and photo papers fix in less than 90 seconds.

There's an added reason too, which assures better *results*. We mean the convenience of controlling the hardening quality of both film and prints to suit your own conditions of temperature and humidity, by adding just the right amount of hardener from the separate bottles supplied in each carton.

Order a carton of FLASH-O-GRAPH today and prepare for a pleasant surprise. You can order direct from any Hunt Branch, or write for price list to Palisades Park, N. J.

Manufacturing Chemists — QUALITY CONTROLLED HUNT CHEMICALS — *Established 1909*

PHILIP A. HUNT COMPANY

PALISADES PARK, N. J.

Chicago • Cleveland • Cambridge • Brooklyn • Atlanta • Dallas • Los Angeles • San Francisco

THE AREA OF THE SCANNING SPOT. A. C. Coates and E. W. Selwyn. *Science and Applications of Photography, Proceedings of the R.P.S. Centenary Conference, London, 1953.* The Royal Photographic Society of Great Britain, Publishers, 1955, pp. 184-188 (5 pages). Measurement of the degree of correlation between transmissions at neighbouring points of enlargements of grainy negatives shows that there is no correlation of any importance except that introduced by the finite resolving power of the optical apparatus and finite grain size of the emulsions. This correlation accounts for the sudden drop in the plot of G against scanning spot diameter at around 5μ in the results of Higgins and Jones. The greater "smoothness" of microdensitometer traces taken with large scanning spots is a natural phenomenon not requiring any special explanation. Some reason is still required to account for the non-validity of the theoretical rules that the density fluctuation should be inversely as the diameter of the scanning spot.

FACTORS AFFECTING REGISTER IN PHOTOGRAPHIC MASKING. J. W. Gosling. *Graphic Arts Monthly* 27, No. 6, June, 1955, pp. 20, 22, 24, 26 (4 pages). Edge effects found in reproductions made with masking techniques may be attributed to misregister of masks or improper size relationship in making the masks. If a mask is out of register the edge effects are the same size and in the same direction in any area of the picture. If the edge effects are unequal, then the size of the mask may be wrong. This may be due to film stretch or shrinkage, or mismatching of lens focal length and mask exposing distance. The relationship of lens focal length and mask exposing distance is described in detail.

COLOUR CORRECTION METHODS AT IPEX. H. M. Cartwright. *Process Engraver's Monthly* 62, No. 740, August 1955, pp. 275, 277 (2 pages). A description of some equipment exhibited at IPEX is given. Two devices used to evaluate correction on continuous tone positives are described. The Reckmeier Monitor and the Farbopter, using the principle of additive color mixture can be applied to tri-color photogravure work. The system provides a means for checking corrections made to compensate for deficiencies in filter transmission or plate sensitivity, as well as determining the suitability of the positive as regards to balance and contrast. These systems were designed for gravure, but could be used for the indirect process of photolithography if corrections were done on the continuous tone positive. The Hunter Penrose Scanner is described. A spot of light scans the copy, which in turn is recorded on a photographic plate. An electronic system calculates the amount of color correction needed and varies the intensity of the light spot as it scans the copy. The result is a separation negative which has been corrected for color and tone values.

Planographic Printing Processes

SOME ASPECTS OF CHROMIUM-COPPER-BI-METAL-TECHNIQUE. A. Fistal. *Science and Applications of Photography, Proceedings of the R.S.P. Centenary Conference, London, 1953.* The Royal Photographic Society of Great Britain, Publishers, 1955, pp. 519-522 (4 pages). The paper is based on the practical development of a plate consisting of a continuous copper sheet with a chromium stencil non-printing surface. It deals with the problems of linking the laboratory technique to existing photolithographic workshop practices, and adapting both to the existing trained labour. It discusses the various development problems stage by stage in the following order: surface finish; colloid coating; formation of stencil; variations in chromium thickness; control of fidelity of reproduction; printing; effect of inks; storage; local rechroming.

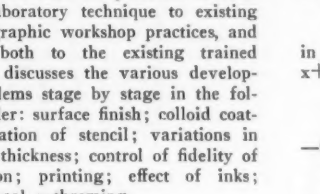
BI-METAL PLATES IN LITHOGRAPHY. Michael H. Bruno. *Science and Applications of Photography, Proceedings of the R.P.S. Centenary Conference, London, 1953.* The Royal Photographic Society of Great Britain, Publishers, 1955, pp. 522-525 (4 pages). The idea of using two metals on a lithographic plate is old. A brief history of bi-metal plates is included. The underlying principle of a successful bi-metal plate is that the image metal must be ink receptive when brought in contact with the same conditions under which the non-image metal is water receptive. The usual printing metal is copper. Chromium, stainless steel, and aluminum have been used successfully for the non-image metals. There are two types of bi-metal plates: (1) the non-image metal is above the image metal, and (2) the non-image metal is below the image metal. Two commercial types of bi-metal plates of each of these classes are described.

VERSATILE PRINTING PLATE. *American Newspaper Publishers Association* 8, No. 114, October 14, 1955, pp. 43-44 (2 pages). Developmental work is being done by W. C. Huebner Laboratories, Mamaroneck Park, N. Y., on a versatile printing plate that could prove suitable for use on offset, letterpress, and gravure presses. The plate is called Metalmist. It requires no etching and no dampening, but relies on a deposit of vaporized metal to keep ink from adhering to non-print areas. Here is how the Metalmist process works: 1. Plate is coated with conventional light-sensitive hot top photo resist. 2. Image is printed down, developed, and burned-in in the conventional manner. 3. The non-printing areas are cleaned. Huebner Labs have used light etch for this cleaning. Etch goes approximately one ten thousandths of an inch. 4 The plate is placed in the Metalmist machine. In a vacuum chamber a film of vaporized alloy is deposited on the plate by corona discharge. 5. Plate is subjected to a developing solution. This washes the alloy from the image areas, leaving a film of ink-repellent alloy on the no print areas. McCall Publishing Co. is working with Huebner Laboratories on this project and is building a large machine for plate processing by the Metalmist method.

*PRESENSITIZED LITHOGRAPHIC PLATES. *German Patent* 884,152. W. Neugebauer, M. Tomanek and T. Scherer. *Monthly Abstract Bulletin* 40, No. 11, November, 1954, page 492. Lithographic plates are sensitized with one or a mixture of ketones containing one of these light-sensitive groupings:

$$-(C{=}C)_x-CO-(C{=}C)_y-,$$

in which x and y are 0, 1, 2, or 3, and x+y is at least 2; or



For example, a 2.5% cinnamalmethylethyl ketone solution in ethanol is coated on an oxidized aluminum sheet, dried, exposed through a line or halftone negative, swabbed with 5% acetic acid, and inked to give a positive offset printing plate.

*PLANOGRAPHIC PRINTING PLATE. *U. S. Patent 2,714,066.* Clifford L. Jewett and John M. Case. *Official Gazette* 696, No. 4, July 26, 1955, Page 522 (1 page). 1. A presensitized, dimensionally stable plate suitable for lithographic printing and related uses, and capable of being shipped in light-proof packages, stored and then used weeks or months after manufacture, comprising an aluminum sheet having on at least one surface thereof a permanently hydrophilic scum-preventing and tone-reducing film formed by reacting an aqueous solution of a soluble silicate with the surface of said aluminum sheet, said film overlying and being firmly bonded to said surface of said sheet and being substantially free of water-soluble material, said film being further characterized in that it will cause an in situ insolubilized diazo image strongly to adhere to the surface of the sheet, and over and in contact with said film a thin coating of a light-sensitive diazo resin, said light-sensitive material being characterized in that, upon exposure of the plate to ultra-violet light through a stencil or negative, it will react in the exposed portions, expelling nitrogen from the molecule and forming a water-soluble hydrophobic and organophilic material which is tightly bonded to said permanently hydrofilm, providing a printing image, the light-sensitive resin material being readily washed away from the unexposed areas, leaving the permanently hydrophilic film bare in said areas, said hydrophilic film being further characterized in that it will prevent the metal from causing decomposition of the diazo light sensitive material, thus providing long shelf life for the presensitized plate.

*PLANOGRAPHIC PRINTING. *U. S. Patent 2,713,822.* Douglas A. Newman. *Official Gazett* 696, No. 4, July 26, 1955, Page 460 (1 page). 8. The method of forming a facsimile planographic image on a

Introducing...

JAVELIN Coated Offset

Another coated offset by Champion, manufacturers of

Wedgwood Coated and Templar Coated Offset

With the addition of Javelin Coated Offset, Champion now offers a complete line of coated papers made especially for offset lithography. For a multi-purpose utility sheet, the new Javelin Coated Offset is outstanding in value and economy—consistent in quality and performance.

Templar Coated Offset has exceptional blue-white brightness and smooth surface . . . a perfect background for brilliant reproductions of rich contrasts and sharp detail.

And of course, for truly distinctive offset lithography, Wedgwood Coated Offset is the standard of the industry. Its unusually bright color and smooth surface provide an excellent basis for reproductions of matchless beauty, vibrancy and depth.

Whatever your paper needs, you'll find precisely the right grade for the job in Champion's wide range of quality coated offset papers. For samples of all three grades write:

CHAMPION PAPERS ®

ADVERTISING DEPARTMENT

THE CHAMPION PAPER AND FIBRE COMPANY

HAMILTON, OHIO

District Sales Offices in New York, Chicago, Philadelphia, Detroit, St. Louis, Cincinnati, Atlanta, Dallas, and San Francisco. Distributors in every major city.

planographic plate through the medium of a superposed transfer sheet having a substantial electrical resistance and provided on one surface with a layer of image-forming fusible oleophilic material which includes the steps of scanning over the transfer sheet with a stylus-directed, image-delineating current in accordance with an original, generating heat in localized areas scanned by said stylus by the passage of current through the transfer sheet and fusing image-forming portions of the layer of fusible transfer material on the transfer sheet and simultaneously adhering said fused imaged portions to the underlying planographic printing surface of the planographic printing plate to produce a printing image thereon.

Paper And Ink

THE PRINTING GAUGE. H. J. Connell. *Pulp and Paper Magazine of Canada* 56, No. 2, February, 1955, p. 60 (abstract only); *Printing Abstracts* 10, No. 5, May, 1955, p. 255. The construction of and the procedure for operating a device known as the printing gauge are discussed. The gauge is used to print an ink film of varying thickness on the paper to be tested. Use is made of the fact that thin films set more rapidly than thick films and that the picking stress on a printed sheet varies inversely with ink film thickness. It is demonstrated that accurate measurements of printing characteristics such as paper picking resistance are possible with this instrument. The importance of and the variables affecting these printing characteristics are covered in detail.

*A NEW TESTER FOR THE DIMENSIONAL STABILITY OF PAPER CONSTRUCTED BY THE GRAFISKA FORSKININGSLABORATORLET IN STOCKHOLM. *Wochbl. Papierfabrik.* 82, No. 19, October 15, 1954, p. 777 (in German); *Bulletin of the Institute of Paper Chemistry* 25, No. 5, January, 1955, p. 387. The instrument is a modification and improvement of the Fenchel tester and permits an accuracy of measurement of 0.005%. Eight sample strips can be tested simultaneously. The instrument is built by Karl Frank, G.m.b.H., Weinheim-Birkenau, Germany. Wochenblatt für Papierfabrikation is published by Güntter-Staib Verlag, Biberach on der Riss (Württemberg), Germany.

*SUTHERLAND DEVELOPS NEW CURL TESTER. *Paper Trade Journal* 139, No. 19, May 9, 1955, page 58; *Bulletin of the Institute of Paper Chemistry* 25, No. 10, June, 1955, page 812. A brief description of an instrument for measuring the amount of curl in paper or paperboard and its use is given. 3 figures. Paper Trade Journal is published by Lockwood Trade Journal Co., Inc., 15 W. 47th Street, New York 36, N. Y.

NEW DRYING METHOD IS DEVELOPED. Odd Hultgreen. *Paper Film and Foil Converter* 29, No. 9, September, 1955, pages 34, 36 and 45-46 (4 pages). A new patented drying system suitable for inks and coatings is described. The equipment uses infra-red heating with regulated wave frequency to get maximum heating and a set of air blower nozzles to drive off evaporated solvents. It is known as the Lica infra-red drying system.

Lithography—General

COBALT SALTS IN FOUNTAIN SOLUTIONS. *Modern Lithographer and Offset Printer* 51, No. 8, August, 1955, pp. 19-20 (2 pages). This article repeats some of the findings given in PATRA's interim report 84E; which was also mentioned in Patra News, June, 1955. With certain reservations, it has been found that both cobalt nitrate and acetate in the fountain solution reduce the drying time. This result was obtained with a variety of inks, some containing liquid driers and one with paste driers.

*LITHOGRAPHIC PRINTING PROCESS. *U. S. Patent 2,719,481.* Charles Laury Botthof, Herman J. Shultz and Olin E. Freedman. Official Gazette 699, No. 1, October 4, 1955, p. 58. 1. In a process of producing a lithographic printing plate, the steps of providing a laminated plate of a lamina of deformable backing material, a lamina of metallic foil having an exposed printing face, impressing an inked relief surface into said printing face to create an inked image area at a distance inwardly of the plane of said face beyond a proper printing plane relative thereto and thereby forming a set indentation of the image area in the foil lamina and the backing material and correspondingly embossing the backing material in relief at its exposed surface opposite the printing face of the foil lamina, thereafter applying an external force to said plate to de-emboss the backing material and force the indented inked image area of the foil lamina to a uniform printing plane relative to the printing face of the foil lamina.

*PRODUCT FOR REMOVING INK FROM PRINTING APPARATUS. *French Patent 984, 221.* Omnium Marocain de Brevets. *Chemical Abstracts* 49, No. 14, July 25, 1955, Column 9840. A product for removing printing ink from rollers, tables, type, etc., comprises a neutralized oil from the distn. of coal, mixed with a chlorinated solvent, and an emulsion of soap.

Graphic Arts—General

USING RADIANT HEAT TO DRY INK. Charles C. Doyle. *Printing Equipment* 85, No. 10, July, 1955, 44-45 (2 pages). This article begins by telling simply the differences between conduction, convection, and radiation. The principle of applying heat by infra-red or "open glow" type equipment is described. The greatest advantage is in large day in-day out production runs where power requirements are found through experience and heat impact is at maximum possible.

RADIANT HEAT AND AIR DISCHARGE DRIER. Charles Carswell. *Printing Equipment Engineer* 85, No. 12, September, 1955, Page 42 (1 page). A drier is described for high-speed web printing and coating applications. Flexibility of control is claimed since several factors are each subject to control. Radiant heat from one or more Corning Pyrex radiant glass heating panels with maximum surface temperatures of 660 degrees provides for a high rate of heat application. In addition, heated air can be pumped in and pumped out of the enclosure at controlled rates to accelerate the removal of solvents. Safety and high speed operation are claimed, even for materials which can easily be damaged by overheating. The installation is simply and economically made, since the heat generating unit is assembled as a "package."

TECHNIQUES FOR CONTROLLING LABORATORY PRINTING CONDITIONS. Jacqueline M. Fetsko, William C. Walker and Albert C. Zettlemoyer. *American Ink Maker* 33, No. 10, October, 1955, pp. 34, 35, 37, 38, 40, 63, 65 (7 pages). Laboratory study of the printing process requires careful control and measurement of such vital variables as printing pressure, speed, and ink film thickness. The techniques for handling these variables are reviewed, and a practical combination for controlled work on a proof press is selected. Static printing pressure is measured with a flexing bridge such as the Huck pressure sensitive base. Correlation of the static pressure with dynamic pressure has been made using strain gages and the Brush strain analyzer. Speed is handled by measuring the time of passage of the cylinder over the plate with an electric stopclock. The method selected for film thickness measurement is direct weighing of the ink on the plate after establishment that resting of the particular ink does not affect results. Use of these techniques in a constant temperature and humidity room has produced highly reproducible results.

MOISTURE RESTORED IN PRINTED WEB AUTOMATICALLY BY STEAM CONDITIONER. Dr. Worth Wade. *Printing Equipment Engineer* 85, No. 11, August, 1955, Page 54 (1 page). This article describes a steam conditioner used to replace moisture to printed Cellophane after heat had been used to set the inks. The conditioner can be used on rotogravure and flexographic presses. Conditioner can be modified to restore moisture to paper and glassine. Operating temperature: 190° F. Steam pressure: 3 to 5 lbs. per sq. in. Web speeds: 50 to 550 ft. per min.

*PHOTOGRAPHIC TYPE COMPOSITION. *U. S. Patent 2,714,842.* Frederick J. Hooven. *Official Gazette* 697, No. 2, August 9, 1955, pp. 176-7 (2 pages). 1. A photocomposing machine adapted to compose a line of composition on a record film including a character carrier having a plurality of characters thereon of different widths, a flash source of light, continuously rotating means for effecting continuous relative movement between said carrier and said light source, means for continuously advancing said film in direct relation with the rotation of said means and in increments which are small in relation to the individual character widths, means for selecting a series of characters,

(*Continued on Page* 125)

the BIGGEST

graphic arts news in years!

A revolutionary new synthetic roller will soon be making graphic arts history in this country.

Years of research and field testing have produced this fabulous new roller. Absolutely nonporous and non-ink-absorbing, Extron has set dramatically new, higher standards for printing performance and ruggedness on the job. There has never been a roller like it.

Strong language? Look at these points of superiority:

- **3 to 4 times as much abrasion resistance**
- **Far superior printing qualities**
- **Amazing resistance to damage and cutting**
- **Fully 100% recovery from deformation**
- **A dense, entirely smooth surface—free of pores, far easier to clean**
- **Superior tack**
- **Absolute resistance to heat, cold, light, shrinkage**

Extron is manufactured by Moreland Corporation and Sam'l Bingham Son's Manufacturing Company—long-respected names in the graphic arts. While it has been field tested primarily in letterpress printing, its potential for offset is tremendous—and it should be available in limited offset sizes in the very near future.

Don't fail to get complete information about this great new Extron roller. Address inquiries to Moreland Corporation, P.O. Box 1018, Willow Grove, Pa.

EXTRON* Rollers

*T. M. applied for; Pat. applied for

DISTRIBUTED BY:

Jomac Inc. • Phila. 38, Pa., New York 38, N. Y.
Frank A. Reppenhagen, Inc. • 335-341 Oak St., Buffalo 3, N. Y.
National Roller Co. • 307 Pearl St., New York 38, N. Y.
Godfrey Roller Co. • 211-21 North Camac St., Phila. 7, Pa.
Harrigan Roller Co., Inc. • 311 Guilford Ave., Baltimore 2, Md.
Sam'l Bingham Son's Mfg. Co. • 636 Sherman St., Chicago 5, Ill.
The California Ink Co., Inc. • 545 Sansome St., San Francisco 11, Cal.

Litho Club NEWS

Milwaukee

Party Has Baseball Film

The first showing in Milwaukee of Miller Brewing Co.'s new color, sound, 16mm baseball film titled "Highlights of the Milwaukee Braves Baseball Club for 1955" was given at the Litho Club's Christmas party, Dec. 13 at the Ambassador Hotel. Also seen was a film titled "Fishing Trip in the Everglades, Florida," by Evinrude Outboard Motor Co. Dinner, card games and refreshments were included in the evening's program.

The January meeting on the 24th will be past president's night at which time all past presidents will be awarded an engraved statuette of Alois Senefelder.

Cincinnati

NALC Council in Town Jan. 28

Members of the Cincinnati Litho Club will be hosts for a meeting of the Council of the National Association of Litho Clubs in Hotel Sheraton-Gibson Jan. 28.

The annual dinner dance of the club will be held Jan. 14 at the Hartwell Country Club. Arrangements are being handled by Nelson Kirby and Russ Esberger, both of Tru-Color Offset Service Co. New club members are Bernard Wilson, Perfection Litho Co., and Reginald Wardley, U. S. Playing Card Co.

D. G. Flanagan of the Korb Lithographing Co. was elected president of the Club for 1956 at a dinner meeting Dec. 13 at the 11th Frame Restaurant. He succeeds William E. Staudt, Jr., of Young and Klein, Inc. Other new officers are: vice president, Bernard Smith, The Hennegan Co.; secretary, Peter J. Schannes, Mail-Way Advertising Co.; and treasurer, Lawrence A. Dougherty, Tri-State Lithographers, Inc.

Members of the board of governors are: John O. Sanker, consultant, and Thomas J. Lacker, Advance Decalcomania Co. The new officers will be installed at a dinner meeting on Jan. 10.

St. Louis

Past Presidents to be Feted

St. Louis Litho Club is planning a past presidents' night for its Feb. 2 dinner meeting at the York Hotel. Each of the club's twelve presidents, beginning with Al Renda, who served in 1943, and concluding with Al Boes who completed his term in December 1955, will receive a bronze statuette of Alois Senefelder. Each statuette will be engraved with the president's name and the year he served.

The club's January 5 meeting was a business meeting for members only.

More than 210 persons attended the annual Christmas party in December.

Washington

11th Annual Christmas Party

Washington Litho Club held its Christmas party at the Willard Hotel, grand ballroom, Saturday, Dec. 10. Dinner, door prizes numbering close to 100 and dancing from 10 to 1 to the music of Tiny Meeker's orchestra were featured. Members of the entertainment committee were Fred Fowler, chairman, Milton Eckert, John Dooley, John Spears, Wilson Burgess, Don Moler, Milton Egger, Joseph Hamm, and Frank Schwedhelm.

Chicago

Preucil to Speak

"Color Separation" is the subject for consideration at the January meeting of the Chicago Litho Club. Frank Preucil, research director for Chicago Rotoprint Co., has made a lengthy study of this operation and will bring the Club up to date on recent technical developments.

Installation of 1956 officers, elected in November, will also be done at the meeting. Willis B. Perry, president of Offset Platemaking Service, will take the gavel from retiring president, Rae H. Goss of Inland Litho. Mr. Goss will become a member of the Board.

The Chicago Club's December meeting was a program of music and magic accompanying an elaborate dinner at Toffenetti's Restaurant. The party ended with the "Grab Bag" whose contents were contributed by each member as the price of admission to the evening's meeting.

New officers of the Litho Club of Detroit are (l. to r.): Raymond Rogissart, Roberts & Porter; Edwin Stoetzer, King Smith Offset Co.; Walter Christensen, Mueller Color Plate Co.; Joseph Fortin, Douglas Offset Co.; James Glenn, Walker Lithograph Co.; Eugene Croteau, Safran Printing Co.; John Murphy, Lithomaster Co.; and Harry Rudeen, Process Lithograph Co.

Detroit

Twin City

Lithography, "Now and Then"

Twin City Litho Club members were given an education Dec. 1, on the lithographic process, "Now and Then," by Jack Dougherty, Cincinnati district sales manager, and John J. Skahill, western district sales manager, Roberts & Porter, Inc. Mr. Dougherty represented the "Old Guard" and John Skahill was the exponent of "Modern Lithography" (no plug for *ML* intended.). Hugh R. Adams, Jr., president of Roberts & Porter, was present to help round out the program.

The annual Christmas Party was held in the main ballroom of the Lowry Hotel, St. Paul with a total of 272 people attending. Much credit for the success of the party was given to the committee: Bill Bosshart; Herb Werner, H. M. Smyth Printing;C. Carnahan, H. M. Pitman Co.; George Kueppers, Brown & Bigelow; and Axel Lundgren, Litho Club president.

Committee appointments for the new year have been made by incoming president, Ed Sorenson, as follows: Herman Goebel and Harold Smith, educational directors; Joe Masanz, editor; Jerry Knipenberger, photographer; Gordon Rahrbacker, Sergeant at arms; Harold Smith, parliamentarian; and Roy Gydeson, telephone committee.

Boston

Film Makers Tell What's New

Ansco, Eastman Kodak and duPont representatives told members of Boston Litho Club of new developments in color printing, high speed film, new masking methods and other research projects at the Dec. 5 dinner meeting at the Sherry Biltmore Hotel.

The four panel members were: John R. Kane, supervisor, educational services, Ansco; W. Donald Clayton, and William Vinton, sales representatives, E. I. duPont de Nemours & Co.; and William Betterley, technical representative, Eastman Kodak Co.

New members welcomed to the organization at the meeting were: Robert McEnany, MBC Studios; William D. Holden, editor, *New England Printer and Lithographer;* and the following of Technical Composition Co., Boston: Kimball A. Loring, Charles H. Bruns, Carl Scotland, and Paul Miller; and John W. Power, Interchemical Corp., Printing Ink division, Cambridge, Mass.

Mr. Beldotti announced a new Policy and Finance committee composed of Curt Reed, sales representative, Interchemical Corp., Printing Ink division, chairman, and Merrill N. Friend, plant engineer, Spaulding-Moss Co., Boston, and William S. Law, New England manager, Interchemical Corp.

Edward Allan, sales representative, Bingham Bros. Co., Cambridge, Mass., was appointed chairman of the Hotel Arrangements committee.

One of the speakers, John M. Lupo, Jr., technical representative, Di-Noc Chemical Arts, Inc., Photographic division, N. Y. was unable to attend the meeting.

Cleveland

Club Elects for '56

More than 435 members and guests attended the Christmas Party and Dinner Dance of the Litho Club of Cleveland and the Cleveland Club of Printing House Craftsman Dec. 3, in the main ball room of Hotel Cleveland.

Cocktails were served and a full course turkey dinner was enjoyed. Twenty door prizes were given away. A floor show and dancing to the music of Clint Nobel and his orchestra completed the evening.

New officers for the Club for 1956, are: president, Harold Johnson, Merrick Lithograph Co.; first vice president, Milton Cornman, Intl. Printing Ink Co.; second vice president, John Hoehn, American Greeting Publishers; secretary, Russell Waddell, Harris Chemical division; treasurer, Harry Simpson, Litho Plates Co.

New members elected to the Board of Governors for a three year term are: Andrew Balika Copifyer Lithograph Corp.; Wm. Dunlap, Nela Press;

Litho Club Guide

BALTIMORE
Norwood A. Heselbach, Secy.
Interchemical Corp.
720 East Pratt St., Baltimore 2, Md.

BOSTON
Thomas J. Cain, Secy.
Hub Offset Co.
175 Purchase St., Boston 10

BUFFALO
Vic Reisch, Secy.
33 Eiseman Ave., Kenmore 17, N. Y.

CANTON, Ohio
Jack R. Reinart, Secy.
1012 Maryland Ave., S.W., Canton

CHICAGO
Fred L. Faulkner, Secy.
Chief Printing Co.

CINCINNATI
Peter Schannes, Serv.
Mail-Way Advertising Co.
229 East Sixth St.
Cincinnati 2, Ohio

CLEVELAND
Milton Cornman, Secy.
IPI
1325 W. 73 St., Cleveland 2

CONNECTICUT VALLEY
Charles H. Waterhouse, Secy.
27 Van Ness St., Springfield, Mass.

DALLAS
L. J. Reynolds
6306 Latta St., Dallas, Tex

DAYTON
Richard Clark, Secy.
1740 Vine St., Piqua, O.

DETROIT
John Murphy, Secy.
13100 Santa Rosa, Detroit

HOUSTON
D. Burton Pitts, Secy.
61 Reisner, Houston, Texas

MILWAUKEE
Allan N. Williams, Secy.
4463 N. Morris Blvd., Milwaukee 11, Wis.

NEW YORK
Tom Cavallero
Schlegel Litho. Corp.
2nd Ave. & 22nd St., New York
Meets 4th Wednesday, Building Trades Club

ONTARIO
Harold E. Swift, Secy.
179 Bartley Drive, Toronto 16, Ontario, Can.

PHILADELPHIA
Joseph Winterburg, Secy.
622 Race Street, Philadelphia 6
Meets 4th Monday, Poor Richard Club

QUEBEC
John Martin, Secy.
Gazette Printing Co., Ltd.
1000 St. Antoine St., Montreal, Canada

ROCHESTER
Roy Binnes, Secy.
Box 401, 87 Pleasant Ave., Pt. Pleasant, N.Y.

ST. LOUIS
Walter Blattenberger, Secy.
1310 South Spring St., St. Louis 10, Mo.

TWIN CITY
Paul Rudin, Secy.
Brown & Bigelow
Quality Park, St. Paul 4

WASHINGTON
H. Thos. Driver, Secy.
PO Box 952, Benj. Franklin Sta.
Washington, D. C.
Meets 4th Tuesday

NAT'L ASS'N OF LITHO CLUBS
Elton N. Baker
9134 Oak Park Ave., Morton Grove, Ill.

AVOID SKIN IRRITATION

USE NON-TOXIC

ROLCOR GREEN ETCH

(DESIGNED FOR SAFETY)

A CONCENTRATED SOLUTION FOR PRESS AND PLATEROOM DEPARTMENTS FOR USE ON ALL TYPES OF METAL PLATES

THE MOST HARMLESS ETCH NOW IN USE. IT CONTAINS LESS THAN ONE PERCENT OF SULPHATE AND HAS NO BICHROMATE OF POTASSIUM OR BICHROMATE OF AMMONIA

- will not tint or discolor plates
- keeps non-image areas cleaner
- keeps dampener roller covers
- cleaner
- will not cause ink rollers to strip

MANUFACTURED BY

ROLL-O-GRAPHIC CORP.

133 PRINCE ST. · N. Y. C.

DEALERS INQUIRIES INVITED

THE TWO COMMON CAUSES OF DERMATITIS AMONG PRESSMEN ARE CHROMIC PLATE AND FOUNTAIN ETCHES, AND TURPENTINE — *Lithographic Technical Foundation Manual # 804*

and Henry Prokupek, Central Lithograph Co.

The new officers will be installed at the next meeting Jan. 26.

Philadelphia

Phila. Reelects Slate for 1956

All officers of the Litho Club of Philadelphia were re-elected at that organization's annual meeting Nov. 28 at the Poor Richard Club. They are:

President, J. Leonard Starkey, Edward Stern & Co.; vice president, Stephen Rubenstein, Colorcraft Litholate Co.; treasurer, Andrew Given, National Decalcomania; and secretary, Joseph H. Winterburg, Phillips & Jacobs, Inc.

•

Washington GAA Officers

New leaders of the Graphic Arts Association of Washington, D. C., Inc., elected last month, are: president, Garwood Chamberlin of E. Merkle, Inc.; vice president, John S. Beckham of Rufus H. Darby Printing Co.; executive secretary, George P. Mallonee; recording secretary, Ralph E. Dewhirst of American Printing Co.; and treasurer, Clarence E. Harlowe of Harlowe Typography, Inc.

•

St. Louis Installs Leaders

The Graphic Arts Association of St. Louis will install newly elected officers at its annual dinner meeting at the Missouri Athletic Club, St. Louis, Jan. 10.

New officers and directors for 1956 are: Leslie F. Wipperman, Garrison-Wagner Co., president; Henry G. Keeler, Jr., Keeler Morris Printing Co., vice president; Oscar Hoffman, Superior Typesetting Co., secretary; George B. Gannett, The Geo. D. Barnard Co., treasurer.

Incumbent directors re-elected are: Con P. Curran, Jr., Con P. Curran Printing Co.; Henry G. Keeler, Jr., Keeler Morris Printing Co.; Clyde K. Murphy, Blackwell Wielandy Co. Newly elected directors: Alfred A. Geiger, Harry A. Pecher, S. G. Adams Prty. Co., and Herbert M. Ross, Ross-Gould Prtg. Co.

The Association of St. Louis reports an attendance of 577 members and friends at the annual Christmas party.

Roger Stephens Dies

Roger Stephens, well known lithographer and world traveler, who published the much-discussed *Litho Media* in 1939, died last month in a Wilmington, Del. hospital of a cerebral hemorrhage. Mr. Stephens, who was 66, had been visiting his brother at Arden, Del. Mr. Stephens was known to the industry because of his association through the years with a number of leading lithographic houses and because of publication of his book on the process, which was highly praised by lithographers and printing buyers.

Reviewing the 210-page volume in the July, 1939, issue of MODERN LITHOGRAPHY, L. Rohe Walter, then advertising manager of the Flintcote Co., New York, and president of the Direct Mail Advertising Association, termed it " . . . a splendid example of effective marketing in print . . . The format of this impressive sales-stimulator and buying guide satisfactorily meets all the design criteria of the user of lithography."

Thousands of persons outside the trade knew of Mr. Stephens as a travel author. His book *Down the Pan-American Highway* described a bus-jeep-ox-cart-foot trip along the trail that later became known as the Pan-American Highway.

Mr. Stephens most recent connection with the trade was in a sales consulting role with Consolidated Lithographing Co., but before that, starting in 1920, he had varied connections with the field. His career covered so much territory, in fact, that at his death, old friends had a hard time recounting all the details.

With the late Walter P. Ten Eyck, he bought Snyder and Black in 1920, leaving in 1928 to form a company in New York with George Kindred, incorporated as Stephens-Kindred & Co. (now Kindred-MacLean & Co.) He rejoined Mr. Ten Eyck in the early 1930's, buying the lithographic firm of Seiter and Kappes, which was liquidated in the early 1940's, several years after he had left. Mr. Stephens was born in Philadelphia. At his death, he was a resident of Westfield, N. J.

To Celebrate Ives Centennial in Philadelphia This Year

Observance of the 100th anniversary this year of Frederic E. Ives, pioneer color photographer and inventor of the half-tone, is being planned in Philadelphia. The studio and laboratory of the Ives Color Co., will be the focal point of the celebration. Michael Pitcairn, president of Ives Color Co., is organizing the activities and has assembled many of Ives' original negatives and some of the inventor's equipment.

Mr. Ives was born Feb. 17, 1856, in Lichfield, Conn., and went to Philadelphia in 1878.

The inventor became known for his development of the photo-mechanical half-tone and at the Novelties Exhibition in Philadelphia in 1885, he displayed a photo mechanical reproduction of a highly colored chromelithograph. One of Ives' contributions to the field of color photography was the development of cameras for making separation negatives by the one-shot method.

The first of Ives' color photography processes was the photochromescope dating from the early 1890's. The first instrument was a monocular device in which three separation positives were viewed through green, red and blue filters, respectively. The images were collected optically and the resultant single image was in full color. Ives showed this instrument in May, 1892.

Later Ives made this a binocular instrument. On the camera he used prisms to rectify the negatives, avoiding the necessity of cutting them apart for making positives for viewing. This was given the name "Kromskop."

Before the first World War Ives brought out a system of color photography which he placed on the market with the financial assistance of Henry Hess, Baltimore steel magnate. In this process, which was designated as HICRO photography (HI standing for Hess and Ives), a one-shot camera using a dupack and one transparent filter was used in obtaining three separation negatives. From these negatives a blue positive was made on paper and transparent red and yellow images on gelatin were superimposed on it. Ives died in 1937.

HAMILTON BOND
ESTABLISHED 1856
W. C. HAMILTON & SONS MIQUON, PA.
OFFICES • NEW YORK, CHICAGO, LOS ANGELES
H. H. Hanson, Chairman of the Board • Lane Taylor, President • J. H. Dunton, Vice President in Charge of Sales

January 1956

BOND-PAPER BUYERS

HAVE OUR SYMPATHY

Paper buyers are among the most conscientious people on earth. Hamilton knew that way back in 1856, the year this mill started up. Over the decades, buyers haven't changed.

But their problem has, particularly when they're dealing with bonds. For practically all bonds are good today, and all are better than they were as little as 10 years ago. That makes it tough. Paper buyers have our sympathy.

We have a suggestion to make things easier, though. It's for every paper buyer to put Hamilton Bond to the test.

There's a very good reason. We keep hearing that today's Hamilton Bond is the Number One No. 1 sulphite—the bond the rest of the industry must match. We do know that, over the years, we've kept improving Hamilton Bond—and that today's is the finest we've produced in 25 years of bond-making.

There can be no question that Hamilton Bond rates high in every bond quality. It's genuinely watermarked, pre-humidified and surface sized. It prints well, lies flat, feeds perfectly. It's strong and durable. It erases like a dream. It's available in white and 11 contrasting colors. Every sheet is darn good-looking, and every one makes printing look good, too.

This sheet itself will back up some of the things we say. But the best test—the only real test—is on the presses. We believe you'll find a sample run revealing. See your Hamilton Bond merchant or write us direct, won't you?

Sincerely,
W. C. HAMILTON & SONS

J H Dunton

J. H. Dunton
Vice President in Charge of Sales

THIS LETTERHEAD IS LITHOGRAPHED ON HAMILTON BOND, WHITE, SUB. 24

PHOTOGRAPHIC Clinic

By Herbert P. Paschel
Graphic Arts Consultant

Q. In using unsharp masks for transparency correction, we often get fuzzy results in the separation negatives. Can we be making our masks too unsharp, or too dense and contrasty?
G.Y.S., Altoona, Pa.

A: Properly made unsharp masks generally will improve the sharpness of separation negatives. Since your experience is contrary to the normal, you must look for one of several possible causes. First check that you have adequate contact between all the elements (transparency, diffusing sheet, film, etc.) when making the mask. Check also the contact between mask and transparency when making the separations. Secondly, check the density and density range of the mask. If too high it is likely that you are recording almost as much of the mask image as of the transparency. In this latter case, however, you would not get very satisfactory negatives in other respects.

On the other hand, if the transparency is very contrasty and the mask is not high enough, highlight detail might get fuzzy because of overexposure. Several other possibilities should be investigated. Check the transparency holder of the camera if the separations are made by projection. It is likely that the holder, if not rigid, might cause the transparency to shift in some way. Vibration could be another factor. Last, but not least important is the register of mask and transparency. If the mask does not fit properly it would contribute to fuzzy results in areas of fine detail. This latter condition would be quite apparent when the masks and transparency are combined.

Camera troubles? Why not drop a note to Mr. Paschel, c/o Modern Lithography, Box 31, Caldwell, N. J. He has just returned from a consulting job in The Netherlands and once more is conducting this column from his New York office.

Q: We have a lens which has become scratched and cloudy. Can it be restored to its original condition?
W.H., Chicago

A: Your question can best be answered by the manufacturer of the lens to whom it should be submitted for inspection. From my personal experience and observations however, I would discourage you from having an old lens restored. To eliminate the cloudy film and scratches it will be necessary to grind and polish the defective lens surfaces. Even when this is done under the best conditions, the repaired lens may not be as good as when originally new. After grinding and polishing, the focal length may be different, in which case the lens will no longer work correctly with the same calibrated focusing system.

Thus, restoring a defective lens may also involve calibrating a new focusing scale. Secondly, both resolving power and color register may be impaired.

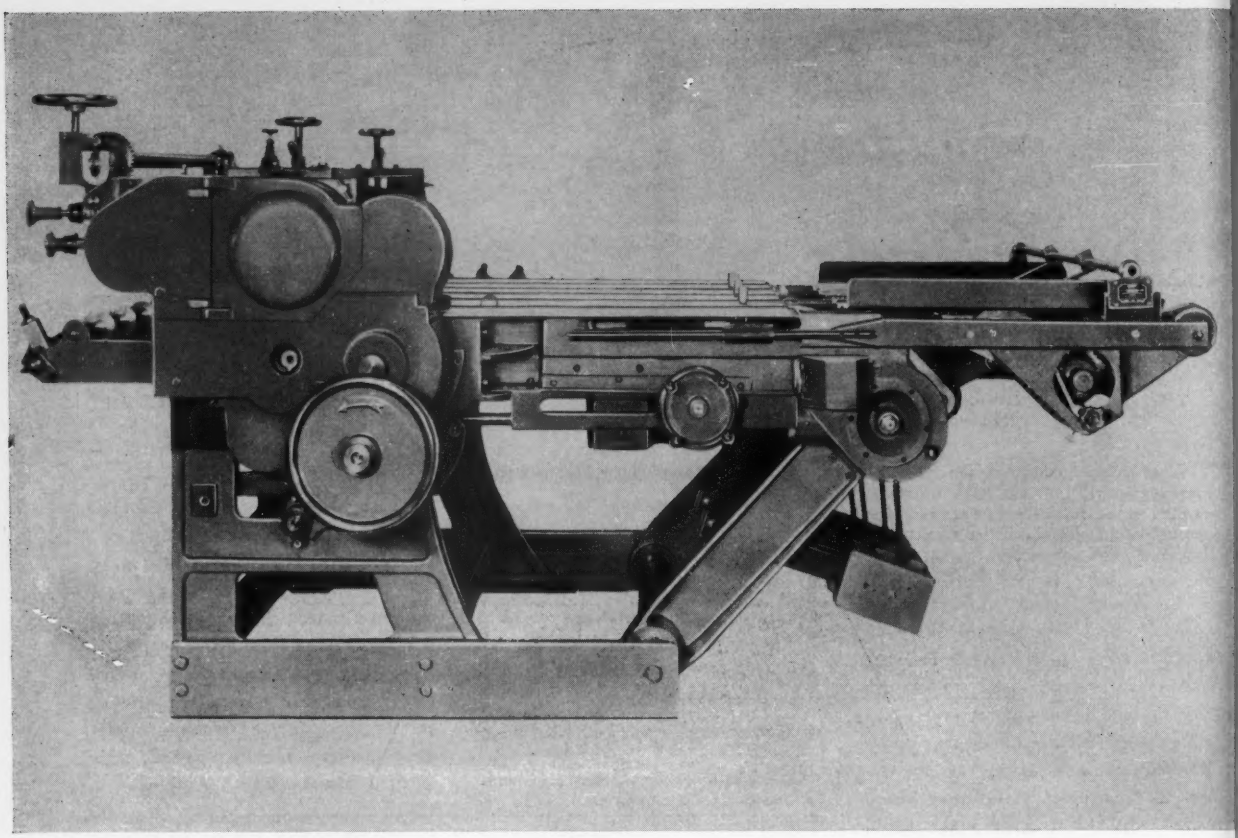
The foregoing are inevitable results that must be expected when restoring a lens. The degree of change is governed by how much grinding and polishing must be done to eliminate the scratches and the cloudy films. If you bear in mind that the thicknesses of the various lens elements and the curvature of the surfaces have been calculated to extremely fine tolerances, you will realize that a restored lens can never match the original specifications. My best advice is to buy a modern coated lens of reputable manufacture. From this you can be sure to obtain photographic results of optimum quality. The performance of a repaired lens always is a gamble.

Q. We have a visual and an electronic densitometer. The density readings of the same subject do not agree. Does this mean that one or the other of the instruments is defective?
H. J. K., Troy, N. Y.

A: Not necessarily. A difference in readings from one instrument to the next for the same density could be due to a difference in the points at which the transmitted light is measured. If measured at some distance from the emulsion surface, it would be "specular" density; while, when measured at or very close to the emulsion, it is "diffuse" density. Between these two points is a range called "intermediate" density which would be some varying mixture of diffuse and specular density.

The exact type of density measured is an inherent property of each densitometer. Instruments that collimate the light that is passed through the sample and then measure the transmitted beam at some distance from the sample give specular density readings. Here, too, variations exist due to different combinations of lens and condensers, etc. The simple ocular

(*Continued on Page* 125)



The New Wagner Model K Lug Type Spot Coater — With Three Register Fingers. (Designed for use with automatic feeder or Wagner press delivery.) This coater can be operated at speeds up to 85 sheets per minute with accurate registration and at higher speeds for plain Coating and Striping.

The Wagner line includes: ROTARY-AIR OVENS, D. E. F. OVENS, AUTOMATIC STRIPPERS, SPOT COATERS, VARNISHING MACHINES, AUTOMATIC FEEDERS, ROLLER REVOLVING MACHINES, LABORATORY COATERS, SYNCHRONIZING DRIVES, AND OTHER SPECIALIZED EQUIPMENT FOR COMPLETE LINES.

When thinking of Progress — think of Wagner

WAGNER LITHO MACHINERY

Metal Decorating Machinery

Harborside Terminal, Unit 3, 34 Exchange Place, Jersey City, N. J.

NS NATIONAL-STANDARD Company *Division*

Metal Decorating

Cost and Pricing Procedures

By Fred L. Heath
President, Fred. L. Heath & Co., Chicago.

THE major weakness in the majority of companies is inadequate cost information. The printing industry is an old industry as compared to automotive, or airplanes, or even compared to steel, which was born only 100 years ago; yet, what I have observed inclines me to believe that these younger industries are considerably ahead of the printing industry in adopting modern cost accounting systems and procedures.

I see no reason why every lithographer cannot set up a dependable cost accounting system. It might appear that I am proposing to give you a magic formula for setting up a cost accounting system. Something on cost accounting comparable to, "How to play the piano in three easy lessons," and without a teacher. I sincerely believe that with a blueprint and instructions and a plan of procedure any man can learn to play the piano, build a garage, or set up a cost system. I know that while he can do this alone, that he will get the end results he wants more quickly and with less error and back tracking if he uses specialized help on the specialized work he wants to pursue.

Now let's get down to this matter of costs. Some of you have a good cost system, and it *is* good. Some of you *think* you have a good cost system, and it is *not good*. There may be some of you who have no cost system and who "guesstimate" on costs. This latter is a form of crap shooting. Sometimes you win, but sometimes you lose. The fellow who has a cost system which is giving him misinformation and the "guesstimator" both are running unnecessary hazards. There is serious danger to both methods of operating. To have a cost system one thinks is good, but which is not good, can chloroform one into believing something that is not true. To "guesstimate" is to gamble unnecessarily.

Typical Case

I want to use a simple operation to illustrate how a cost accounting system can be set up. Let's assume that a metal decorator has a small shop, is specializing in coating, and has a coating machine and oven. This owner focuses his company's sales activities to create business from customers who desire to have their sheet stock "finished" before they fabricate it. So they order a coating job done. The question of coat procedures is simple. Let us start the process by determining the fixed costs. These are the costs that continue whether the company operates or shuts down.

Rent — or the cost to carry the building if you own it, including the building taxes, maintenance, depreciation, insurance and investment return.

Taxes—personal property and real estate (if real estate is not included in cost to carry the building).

Insurance—property.

Depreciation — on all equipment, etc. Depreciation on building should be included in cost to carry building.

Watchman—in case your insurance contract calls for watch service if you shut down your plant.

The direct and indirect labor and overhead costs, for this example coating machine and oven operation, would not require the detailed analysis which follows. However, the procedure for determining machine rates or overhead cost is detailed because there are many of you who have larger operations and it is for these the procedure is detailed.

Direct labor costs are the labor work on production, the coater, feeder, nestor or stripper, etc.

Indirect labor is the cost of "productive service labor." Labor whose work is to perform all services which are necessary to supervise, keep record, and see that materials, tools, etc. are available to direct labor workers. Indirect labor includes all labor

Be Sure that the

arc lamps you buy are motor-driven

—*fully automatic!*

STRONG GRAFARC ARC LAMPS

GRAFARC 95 AMPERE PRINTING LAMP
For use with vertical printing frames under 40" x 50".

GRAFARC 140 AMPERE PRINTING LAMP
For use with vertical printing frames 40" x 50" and larger.

FULLY AUTOMATIC • HIGH INTENSITY

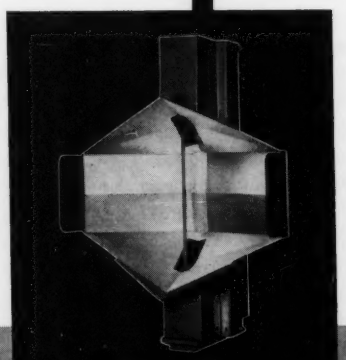
Cut Time in Half on Process Exposures

- Uniform Coverage of Large Areas
- Eliminate Dot Undercutting
- Constant Color Temperatures
- Eliminate Illumination Variables
- Accurate Control of Densities, Regardless of Line Voltage Variations
- Power to Punch Through Dense Kodachromes
- Sharper Reproduction

Overhead model printing lamps available for use with horizontal printing frames. Burn in normal position, avoiding smoking of reflector and preventing ash from depositing on surfaces in the light path.

Models for Monotype Huebner MH photo composing machines assure precise control of intensity for accurate repeats.

Send for free literature or arrange for a demonstration by your dealer.



CHALLENGER CAMERA ARC LAMP
Vertical trim. Burns at 75 amperes and 23 volts at the arc. Readily mounted on lamp support arms of any camera.

THE STRONG ELECTRIC CORPORATION
17 CITY PARK AVENUE TOLEDO 2, OHIO

Please send free literature on Strong Grafarc Lamps.

NAME_____
FIRM_____
STREET_____
CITY & STATE_____
NAME OF SUPPLIER_____

A SUBSIDIARY OF GENERAL PRECISION EQUIPMENT CORPORATION

and supervisors in the plant that are not classified as direct labor.

In order to determine indirect labor costs, the amount of man hours a year for each function must be estimated. Estimating the hours required per year for the different types of indirect labor functioning is the quickest and most accurate procedure to determine indirect labor costs where functions do not require full time manpower. For example, the purchasing function may require only 16 man hours per week or 800 man hours per year. Cost estimating may require 24 hours per week or 1200 hours per year. One man handles both. It is desirable to establish indirect labor costs by function, not by employe. When indirect labor costs are set by function with some analysis of the time requirements for indirect labor, you are working objectively to determine what costs should be. You are setting up a budget, not accepting costs as they are.

To determine indirect labor costs, you will analyze to determine, based on 2000 hours as a year's operations.

How many man hours of supervision will our operations require in a year? Supervision includes superintendent and foremen, and working foremen for the number of hours they spend supervising, segregated from their actual working time.

What maintenance man hours per year? What storekeeper man hours per year? Production scheduling man hours per year? Janitor man hours per year? Cost estimating man hours per year? Laboratory man hours per year?

After these hours have been determined by function, you price the time required for each function with the occupational rate or salary to determine the dollar costs for these functions. The total will represent what your indirect labor cost should be. It is comparable to a budget which is set up for actual requirements of man power for a 2000 hour year.

Manufacturing Expenses

Based on operating for a 2000 hour year, (40 hours week, 50 weeks), determine:

What will be our power and light cost? What will be our gas cost? What will be our water cost? What will be our maintenance materials cost? What will be our supplies cost? etc.

The total of the manufacturing expenses in dollars for 2000 hour year, plus the indirect labor cost in dollars for the same year, gives you the total plant overhead cost for a year.

If you wish to establish costs on a direct labor and overhead basis, you will determine the ratio of the overhead to the direct labor cost and use this ratio for costing a job. Every dollar of direct labor cost must have added to it the amount of overhead the ratio provides, i.e. if the overhead is 150 percent of the direct labor, then a job requiring $50 of direct labor would be charged with $75 overhead cost.

. . . . The author presented this paper, "The Consultant Engineer's Approach to Cost and Pricing Procedures," at NMDA's Convention in Atlantic City last October.

However, in the lithographic industry, a machine rate or machine rates for costs proves a most desirable plan. Adding the direct labor and the overhead (indirect labor plus manufacturing expense) gives the total cost for the example, press and oven operation for a year. If this total cost were divided by the 2000 hours, you would have the cost per hour to operate this example plant of a machine and oven.

This hourly cost is called a machine rate. If you have a job which requires three hours of machine and oven operation, (which includes make ready, running time and wash up time for this job), the cost is three times the hourly machine rate. This machine rate also can be called the conversion cost, and will be referred to as such, as it is the labor and overhead required in the plant to "convert" or change the appearance or finish of the metal into the job the customer ordered.

Now I would like to point out the weakness in many otherwise good cost accounting systems. They use actual operating time instead of normalized operating time. When they do this they are using a lower rate (or overhead percentage figure) in a good economy, and thus lowering their costs in a sellers' market. When a buyers' market develops and business drops off, the machine rate based on lower activity is increased and so the costs increase in a buyers' market.

Normalizing activity is establishing an average activity and using this as a fixed pivot for cost accounting. The accepted practice is to normalize the use of equipment at 65 percent or 70 percent of full usage one shift. This puts a company in the position of having stable costs. The fact that in an unfavorable economy a company cannot get the standard price should never change costs. The fact that a company can get more than a standard price in a sellers' market should not change costs. The variation in profit, (or loss), is recovered in over-absorbed overhead if it operates above 70 percent. If it operates at less than 70 percent, its costs are the same, but there is unabsorbed overhead which depletes profits the amount overhead is unabsorbed.

To illustrate, assume that the cost of using a piece of equipment, or an arrangement of equipment, for a 2000 hour year were $30,000. The actual rate would be $15 per hour for 2000 hours. However, if this equipment were used for only 1000 hours in a year, the actual cost of operation could drop from $30,000 to, let us say $21,000, and the machine rate for 1000 hours would be $21 per hour. If this equipment were operated 1400 hours, the actual cost to operate could be $25,000, and dividing 1400 hours into this cost would produce an hourly rate (actual) of $18. Thus, if actual conversion cost (machine rate) were used, this company would attempt to get $21 per hour when business was bad and would be satisfied with $15 per hour when business was good.

In figuring the actual cost of operating at 1400 hours (or 1000 hours) the same procedure is followed as in estimating for 2000 hours. The fixed costs will be the same. Direct labor costs will be less and some of the indirect labor and manufacturing expenses will be lower. The total we have assumed has come out $25,000 for 1400 hours of operations. A 1400 hour year divided into $25,000 cost

TABLE I. Standard for costs

Number of hours actually used per year	1000	1400	1700	2000
Actual cost per year for hours shown	$21,000	$25,000	$27,500	$30,000
Actual cost per hour (dividing actual hours into actual cost)	$21.00	$18.00	$16.00	$15
Standard Cost per hour (based on 1400 hours)	$18.00	$18.00	$18.00	$18
Cost Variance	$3.00 minus	0	$2.00 plus	$3 plus
Number of hours variance from standard	400 hours minus	0	300 hours plus	600 hours plus
Under or Over absorbed cost	$1,200 under absorbed	0	$600 over-absorbed	$1,800 over-absorbed

gives a standard machine rate of $18 per hour. This rate is to be charged the minute a job goes to this equipment. The make ready, running time, and wash up time is included in the time charged for a job. Setting this machine rate up at $18 standard per hour, the tabulation in Table I will show the amount of under or over absorbed conversion cost.

In a competitive market if activity dropped to 1000 hours, this company can quote competitively using $18 instead of $21, the actual cost. If the plant activity is low, there can be $1,200 of unabsorbed machine cost which will be deducted (automatically) from profits, or if there are no profits, it will represent a *loss*. It is much better to quote $18 and get business to keep operating than it is to quote $21 and not get business, shut down and lose your market and dissipate your assets.

The completion of costs is to add materials cost to the machine cost for the run of the job. To the materials should be added a percentage for allowable spoilage, and for the receiving cost. We now have a factory cost of labor, overhead and materials. Labor tickets, or the production order, are used to provide machine time used. Requisition for ink or other direct materials is used to price materials cost.

I have included no administrative or selling costs or profit in this developing of a machine rate for cost purposes. There are decided advantages in segregating sales and administrative from manufacturing costs. Including sales and administrative in a machine rate in a sense divides responsibility. If profits are not what they should be, it is difficult to pin point cause. The plant says the front office costs are out of line and the front office says the plant has run costs up, and thus reduced the company profits.

Pricing

When factory costs are completed, pricing starts. Pricing is an extension of factory costs to include sales and administrative costs and the proper amount of profit. Profit should be regarded as an element of cost as much as depreciation. It should be the right amount of profit for each job to carry. The right amount of profit when preplanned, should be charged to a job in proportion to the conversion cost or machine utilization in the plant. The conversion cost principle of pricing is the soundest procedure for pricing, i.e. allocating to each job the proper amount of administrative and selling cost and net profit based on the conversion cost.

The estimated, or past year's administrative cost, and selling cost should be charged in proportion to the conversion cost (the machine rate or labor, plus overhead used on a job, is the conversion cost).

Profit should be charged in proportion to the conversion cost. To price a typical job the following steps are taken: 8.2 percent of the conversion cost, or machine cost for a customer's job, is charged as the proper amount

(*Continued on Page* 119)

Canco Shows Oblong Design

A modern I-style, oblong can designed for packaging a wide range of liquids was introduced by American Can Co. at the 42nd annual meeting of the Chemical Specialties Manufacturers Association, New York Dec. 5-7. The new container is the first solderless oblong can on the market. The cemented side seam permits lithography all around the can.

New features include a clinched nozzle which prevents corrosion and flux splashes and allows a lithographed top; and a no-drip spout with outward curl on the neck that eliminates the sharp inside edges. The enameled inside of the can provides 100 per cent protection for hard-to-hold products. A small recess in the center bottom of the can lends excellent stackability.

American Can Company's modern I-style, oblong can introduced at the 42nd annual meeting of the Chemical Specialties Manufacturers Association in New York Dec. 5-7. The first solderless container of its type on the market, the can has a clinched nozzle, no-drip spout, fully enameled inside, cemented side seam, and compact stackability. At left is the pint can with a corner nozzle; at center are two quart cans showing the stackability, and at right is a quart can showing the center nozzle.

The container is made with a nozzle in either the center or corner.

•

Consent Ends R. Hoe Case

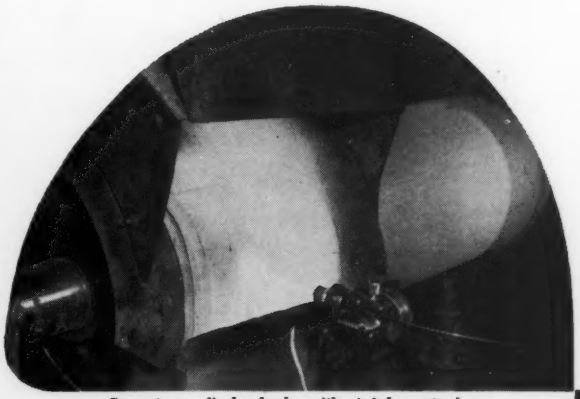
A decree issued Dec. 7 by Attorney General Herbert Brownell, Jr., requires R. Hoe & Co., New York City, to withdraw from alleged international cartel agreements covering the manufacture, distribution and sale of printing presses. The decree was described by the Justice Department as designed to promote exports by Hoe.

SAVE on press cylinders!

LOWER equipment costs!

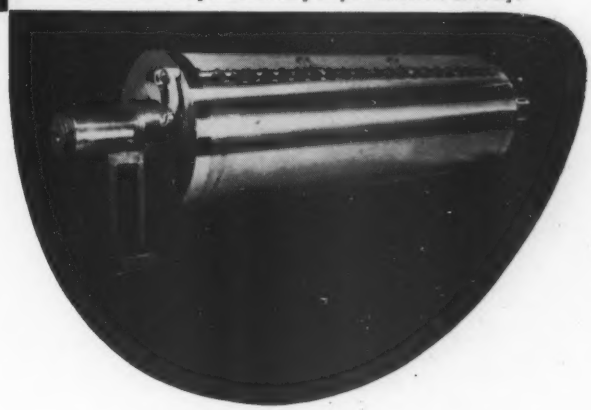
WORN CYLINDERS **RECONDITIONED** GOOD AS NEW!

For the past twenty years, Arthur Tickle Engineering Works has specialized in reconditioning damaged printing press cylinders or cylinders that have been reground previously on the bodies and are too small in diameter.



Spraying cylinder body with stainless steel.

Reconditioned Cylinder is fully inspected before delivery.



Cylinders rebuilt by our process are more durable because of the increased hardness of the deposited metal! In addition, all cylinders, upon arrival, are further checked for size, condition of bearers and journals and body runout in order to eliminate unnecessary work or discover hidden sources of future trouble.

Cylinder journals, if scored or worn, are rebuilt with High Carbon Steel (363 Brinell hardness) and ground to standard diameter, with a resulting increase in the life of the cylinder!

Write, Wire or Phone for Complete Details!

ARTHUR TICKLE ENGINEERING WORKS, INC.

21 Delevan Street • Brooklyn, 31, N. Y.
MAin 5-4200

You can get it all from Mead

Papermakers to America

With experienced papermakers, modern mill facilities, and vast woodlands, Mead is in an exceptional position to make and market a wide range of grades. Here is a list of products, each of which successfully meets three Mead requirements: it is the best of its class; it fills a real customer need; and it provides ever greater value through improved quality.

- ★ Correspondence and Office Papers
- ★ Letterpress Papers
- ★ Offset Papers
- ★ Indexes and Bristols
- ★ Cover Papers
- ★ Blotting Papers
- ★ Label Papers
- ★ Business and Accounting Forms Papers
- ★ Specialties

MEAD papers

THE MEAD CORPORATION

Dayton, Ohio

Sales Offices: Mead Papers, Inc., 118 West First Street, Dayton 2, Ohio
New York • Chicago • Boston • Philadelphia • Atlanta

News
ABOUT THE TRADE

U. S. Buys Maryland Plant

Acquisition of the good will and equipment of the Maryland Color Printing Co., Baltimore, by the U. S. Printing & Lithograph Co., Cincinnati, O., was announced recently by W. H. Walters, president of U. S.

Mr. Walters said that operations will be continued in the Maryland plant at Fallsway, Holliday and Hillen Streets, but future plans call for consolidation of these operations with the existing Baltimore plant of the United States Printing & Lithograph Co.

•

Industry Wary of Union Merger

Merger of the American Federation of Labor and the Congress of Industrial Organizations into a combined union last month may have a profound effect on the future history of the country and the printing industry. This was the thought expressed in a flash bulletin issued Dec. 28 from Lithographers National Association.

The LNA said:

"There still remains much of the antagonism and rivalry between the affiliated unions to be eliminated. Particularly is this true in the printing industry. Randolph of the ITU was one of the few who protested against the merger, although he ultimately voted for it. The ALA, reversing a previous position, joined the merger with what appears to be some reluctance with a strong admonition to its officers and International Council to carefully preserve its traditional jurisdictional rights. Perhaps some real significance should be attached to the fact that the printing industry is represented on the Board and the Executive Committee by Matthew Woll, President of the International Photo-Engravers Union, one of the smallest unions in the graphic arts industry."

"Despite these real conflicts there appears to be a sufficient impetus to make the merger successful. The ability of the new organization to promulgate its avowed purposes will be in direct relationship to its ability of eliminating these conflicts. The action of combining these two great organizations may well have as much importance on the future history of the country as did the advent of the New Deal in the early thirties."

The LNA staff is preparing a detailed report on the merged organization.

•

Reinhardt in Sales for Philipp

Richard C. Reinhardt has been appointed director of sales of Philipp Lithographing Co., Milwaukee, it was announced Jan. 3 by F. W. Glatz, president. Mr. Reinhardt was formerly vice president of sales for Milwaukee Lace Paper Co., division of Smith-Lee Co., Inc., Oneida, N. Y.

He came to Milwaukee in Sept., 1953, when the parent company acquired the Milwaukee firm. He was sales manager of Smith-Lee prior to the move to Milwaukee, having joined that organization in 1942.

Mr. Reinhardt will direct and expand the territory covered by the firm's offices in the Middle West and on the East Coast.

Harris Names Randall in N. Y.

Ralph H. Randall has been advanced to New York district manager of Harris-Seybold Co., according to

R. H. Randall

a recent announcement by Ren R. Perry, vice president of sales. Mr. Randall, who has been Harris-Seybold's Philadelphia district manager since 1953, will succeed T. M. Broadston, recently advanced to the newly-created post of eastern sales manager.

Mr. Randall, who has been with the company since 1934, has handled sales assignments for the company in 19 states in the eastern, western and southern areas of the country.

•

Chicago Litho Enlarges Plant

Chicago Litho Plate Graining Co., Chicago, has enlarged shop facilities in all departments and has moved the general and executive offices around the corner to 549 W. Fulton St. Chicago Litho Products Co. also made the move.

Harsh Is Operations Manager

Harold C. Harsh, production manager, Ansco division, General Aniline & Film Corp., has been named to the newly created position of manager of operations, it was announced Jan. 3. Mr. Harsh will be responsible for directing and coordinating the activities of Ansco's camera plant, paper plant, film plant, warehousing and industrial engineering departments.

He became a production supervisor in Ansco's paper plant in 1934 and was later placed in charge of development work. From 1946 to 1949 he was manager of the Chemical Development department.

After World War II Mr. Harsh was sent to Germany at the request of the Department of Commerce to investigate progress in color photography.

•

Todd to Study Automation

An intensified development program to deal with current and future aspects of automation in the office and banking equipment industry was announced by the Todd Co., Rochester, N. Y. last month.

The Todd Co., newly-acquired subsidiary of the Burroughs Corp., Detroit, has specialized for nearly 60 years in the manufacture of protected, insured checks and check-protecting equipment. The new program will stress banking and office efficiency at least equally with check-handling safety, according to George L. Todd, president.

•

Thrift Week Also Printing Week

National Thrift Week and Printing Week will be held at the same time this year, the week of Jan. 15, offering Bank Stationers section, Lithographers National Association, a double chance to promote their services in bank communities. Bank stationers can demonstrate their identification with local banks and establish in the bankers' and public's mind, their own place as quality lithographers.

Bank stationers were sent a copy of a check handwritten by Benjamin Franklin, for use in their own newspaper ads, house organs or as blowups for placards, etc.

George J. Walsh

Walsh to Direct LNA Platemakers

LNA president Carl R. Schmidt has announced the formation of an advisory committee to direct the affairs of the newly-created Platemakers division. George J. Walsh, president, Offset Engravers Associates, New York City, was named chairman, and Paul Hansen, vice-president, Chicago Litho Plate Graining Co., Chicago, Ill., was made vice-chairman.

Other Advisory Committee members include: C. C. Barnes, president, Ft. Wayne Engraving Co., Ft. Wayne, Ind.; Francis Hortenstine, president, The Bell-Hortenstine Co., Cincinnati; Walter E. Lange, president, Lange & Preu, Inc., New York City; and Thomas Stevenson, Jr., president, Stevenson Photo Color Separation Co., Cincinnati.

Ernest E. Jones, president, Graphic Arts Corp. of Ohio, was previously named to serve as LNA executive committee representative to the Platemakers division. Executive director W. Floyd Maxwell is currently serving as staff representative to the Advisory committee.

Mr. Maxwell spoke before the Midwest Litho Trade Association in Chicago, Dec. 6, and outlined the full program before 33 representatives of 18 trade shops in the Chicago area.

•

Forbes Names Supervisor

Benjamin H. Kidder was appointed supervisor of the combined letter art and stripping departments of Forbes Lithograph Mfg. Co., Chelsea, Mass. it was announced last month. He has been with Forbes for 18 years.

Stecher-Traung Exec. Changes

Ralph J. Wrenn has been named executive vice president of Stecher-Traung Lithograph Corp., San Francisco and Leo P. Blank has been advanced to vice president of sales for the San Francisco division. Frank T. Sheedy was made vice president of production.

•

Rapp Named Hoe Manager

Appointment of Theodore A. Rapp as industrial sales manager of R. Hoe & Co., Inc., was announced Dec. 9 by Joseph L. Auer, president.

Included in Mr. Rapp's duties will be the management of the recently organized Contract Manufacturing division, and development of new product lines for Hoe.

He was associated with Nowland and Company of Greenwich, Conn., management consultants, previously.

•

Craftsmen Photo Lithogs. Move

New address of Craftsmen Photo Lithographers is Route 10, Hanover, N. J. Mailing address of the plant which is opposite Forbes Garden Center is: Box 132, Hanover, N. J.

•

WPUC Lists Paper Savers

Waste Paper Utilization Council, in a six page folder just released, urges paper consumers to take note of four simple steps that will pay dividends in protecting their paper supply and raise waste paper revenue:

(1) Watch the raw materials you use, particularly adhesives. Some adhesives cause trouble in reworking waste and destroy its value. Permissible adhesives are available for practically all print shop uses.

(2) Post signs over each container specifying which grade of waste paper goes into each. Be sure to mark a separate container for trash, so foreign elements aren't carelessly thrown into the waste paper containers.

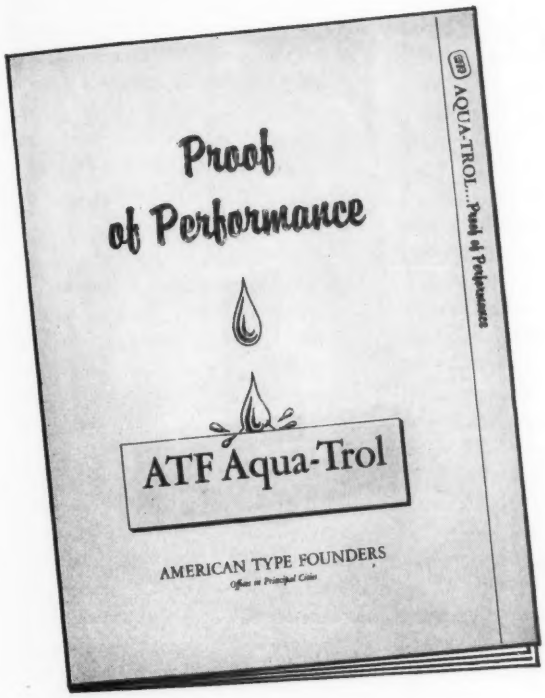
(3) Be sure paper is tagged as it comes into your plant. The tag should specify the grade of stock, so waste from each printing job goes into the right container.

(4) Instruct every member of your firm on the purpose and method of waste paper conservation.

enthusiastic users say:

"AQUA-TROL®

will pay for itself in many ways"



Here's outstanding evidence, in the form of letters from dozens of Aqua-Trol users, describing the way Aqua-Trol solved their production problems, compiled in a new booklet "Proof of Performance." Based on the comments of other Aqua-Trol users, here is how Aqua-Trol can pay its way in *your* shop:

CONSISTENT COLOR QUALITY "Heavy solids and halftone tints remain good and true from beginning of run to end . . . I am completely sold on Aqua-Trol . . . it will pay for itself in many ways."

LONGER PLATE LIFE ". . . the plate looked good for another 110,000 impressions."

QUICKER INK DRYING "Used to wait overnight or even days to run second color. With Aqua-Trol, we now run one color behind another with no trouble."

EASIER PRESSWORK "The proper coverage is achieved on the first few sheets . . . and through the rest of the run."

Aqua-Trol is available for every make and size press from 10″ duplicators through 73″ roll-fed units. Brackets supplied with the unit permit speedy installation.

"Proof of Performance" and the booklet "How Aqua-Trol Can Help You" are yours free for the asking. Just fill out and mail the coupon below today.

3499

ATF

Better, More Profitable Printing from the Widest Line of Equipment

AMERICAN TYPE FOUNDERS
200 Elmora Avenue, Elizabeth, N. J.

Please send me: ( ) "Proof of Performance"
( ) "How Aqua-Trol Can Help You"

Name.....Title.....
Company.....
Address.....
City.....Zone.....State.....

ML-1

LTF Publishes New Research in Progress Report No. 35

IN an advance copy of a Progress Report released Dec. 29, Lithographic Technical Foundation gives more data on the Paper Hygroscope. With the instrument, the lithographer can tell in advance whether the paper needs conditioning to avoid trouble from wavy edges, tight edges, or poor register. LTF published a correction chart based on data collected from many tests; however a different method of developing Relative Humidity data was possible and differences in calculated humidities.

LTF's recommendations are that a reasonably good paper RH value can be obtained by adding or subtracting the equilibrium RH value as shown by the Paper Hygroscope from the room RH as determined by a sling psychrometer. However, it is safe and practical to do this only when the paper temperature is the same as the room temperature or if there is only one or two degrees F. difference.

On the basis of these tests, the only way that the alignment chart can be used is to keep to the system around which it was developed. This means that the sword should be inserted in the pile of paper and the reading taken after it has been there for *exactly one minute.* This should be done with old and new models of instruments, and those that read RH directly or as a difference from the room RH.

The use of one minute readings and the correction chart is much more practical than the use of equilibrium readings even though a stop-watch may be needed for exact timing in some cases. When making measurements, LTF suggests that several readings be taken and the results averaged. This is especially desirable when the needle is still moving fast when the one minute time is up.

If these procedures are followed, the corrected RH values of the paper will show variations of only about ± 2%. Such variations are within the acceptable limits of precision to be expected from an instrument like the Paper Hygroscope and are accurate enough for all practical purposes in a litho plant, LTF said.

"Hickies and Spots" is reported by Robert F. Reed, LTF Research Consultant. Mr. Reed's summary:

LTF's studies have shown that hickies and spots in printed work can be caused by ink skin or particles of dried ink, by slitter or cutter dust on paper, by particles of fiber or coating picked from the paper surface, by lint and fuzz, by dust or dirt from the ceiling or from accumulations on press members, or by shedding dampener rollers. Each type of hickey or spot can be traced to its source by a little detective work. But prevention is all important. This involves care in the manufacture and handling of ink, careful press wash-ups, and good housekeeping around the press. If paper contains dust, tends to pick in small spots, or is linty, there is not much the pressman can do about it except to wash up the press frequently and take his troubles to his paper supplier.

Reporting on tannic and alum etch, LTF said that it can do an excellent job on zinc plates either surface or deep-etch. It is as good as cellulose gum etch on a post-treated plate and better than cellulose gum etch when no post-treatment is used. LTF recommends it especially for use with plates that are hard to develop or which require ammonia before or during development. It has some of the action of a post treatment. On surface plates, however, it should like all other etches be used with a post treatment. The etch does not contain bichromate and no hazard of dermatitis. Don't use the etch on a presensitized plate because it will remove the image.

•

MLA to Elect Officers

Members of Metropolitan Lithographers Assn., New York, were to meet for their annual business meeting Jan. 11 at the Hotel Shelburne. New officers of the Association and eight new directors are to be elected. Following the election, P. M. Heuzey of Humitemp Corp. was to discuss types of installations and equipment for temperature and humidity control in lithographic plants suitable under the regulations of New York City.

Polzin Purchases A.B.C.

Sale of stock of the A.B.C. Litho-plate & Graining Service, Chicago, to Burnell Polzin has been announced. Mr. Polzin purchased 50 percent of the stock from Elmer Grembecki last month.

The business was started in 1939 by Burnell Polzin and his brother in a 1,000 square ft. room; now expanded to occupy three floors of the original building.

•

Fraser Paper Fetes Cryan

J. R. Cryan, assistant general sales manager, Fraser Paper, Ltd., New York, was honored at a recent meeting of the company sales staff for his 25 years of service. A gold watch was presented and a letter from Aubrey Crabtree, president, was read expressing the appreciation of the company for Mr. Cryan's quarter century of service.

•

GAF To Interhandel: Donovan

General William J. Donovan told a Senate Judiciary subcommittee in Washington recently that the U. S. government should promptly return General Aniline and Film Corp., to Interhandel, a Swiss investment company. General Donovan, head of the U. S. Office of Strategic Services during World War II, is counsel for Interhandel, whose 90 per cent stock interest in General Aniline has been held by the Alien Property Office since 1942. He declared that the decision of the Swiss Authority of Review that Interhandel was truly Swiss is legally binding on the United States under the Washington Accord of 1946.

Walter Germann, managing director of Interhandel, also asked the Senate Judiciary subcommittee to help Interhandel regain its interest in General Aniline and Film.

"I appeal to the sense of fairness of the American people to help Interhandel solve the problem in which we are innocently involved," Mr. Germann said. He pointed out that a technical conflict of Swiss and American law has blocked Interhandel from a trial of its case, although its lawsuit for recovery of its property has been pending before U. S. courts for years.

"your word . . . as good as your bond"

Important thought . . . for your customers, your business and yourself . . . important reason why executives and professional persons (yes, and quality printers) choose a Parsons bond paper for their letterheads and other important documents. Made from all-new cotton fibers, Parsons bonds add prestige, preserve your written thoughts years longer, and perform far better. Ask your printer for a Parsons bond paper . . . a permanent, prestige business paper.

Parsons PAPER

WRITE ON YOUR BUSINESS LETTERHEAD FOR PORTFOLIO 1A1, PRESTIGE LETTERHEAD DESIGNS, BY LESTER BEALL. PARSONS PAPER CO., HOLYOKE, MASS. © PPCO 1956

Why Quality Printers Pick Parsons Prestige Business Papers

Printers who *know* Parsons papers tell us that they recommend a Parsons bond or writing for any important job. Here are some of their reasons:

- Customers seldom question the quality — Parsons makes only high-grade cotton fiber papers.
- Buyers like the "plus" values in prestige, appearance, "feel", (and often) the top permanence of the extra No. 1 grade — Parsons is competitively priced grade for grade.
- A first order usually leads to a repeat order, and often to additional printing where Parsons is specified.
- Pressmen like to run Parsons bonds — their work looks better (and *is* better) because the paper is made for *good* press work.
- Your profits are secure . . . fewer headaches in the shop are the rule when a job runs on Parsons.
- Parsons bonds are "safe" papers to recommend to any buyer — young or old, green or experienced, he seems to know that Parsons is *right* for — letterheads, envelopes, statements, billheads, and literally scores of other important jobs.
- Parsons adds dignity and prestige to the printer — odd but true, as so many printers who regularly stock and recommend Parsons papers know.
- Parsons Letterhead Design Portfolio is often a spearhead to start new business — thousands of printing customers across the country consult this Parsons Manual by Lester Beall regularly for sound design ideas.*

When you stock and recommend any of these Parsons cotton fiber papers, you'll guarantee yourself better printing jobs, stronger customers and greater profits:

Cotton Content:	**Parsons Bonds**
100% Extra No. 1	Old Hampden Bond
100%	Parsons Bond
75%	Laconia Bond
50%	Edgemont Bond
25%	Heritage Bond
	Parsons Writing
100%	L'Envoi
	Parsons Parchment
100%	Parsons Diploma

Parsons is preferred by your customers

When you recommend a Parsons Paper, it makes sense to your customer. He has been pre-sold by Parsons advertisements stressing prestige, performance and permanence. In 1956, Parsons advertising will appear in 12 magazines, including *Business Week, The Office, Office Executive, Office Management, Journal of Accountancy* and *Fortune.* To cash in on this advertising, it will pay you to stock and recommend Parsons bonds, writings, ledgers and indexes.

A Friendly Invitation: You are cordially invited to become a charter member, during 1956, of **The Parsons King Cotton Club** . . . an exclusive group of men and women, who in the designing, producing or selling of fine printing, strive constantly to attain the high-quality craftsmanship on which the Graphic Arts Industry has been built.

*

Parsons Paper Company • Holyoke • Massachusetts

Gentlemen:

☐ Please mail me a complimentary copy of your Lester Beall *Letterhead Design Manual.*

☐ I would like to become a charter member of The Parsons King Cotton Club. Please mail information.

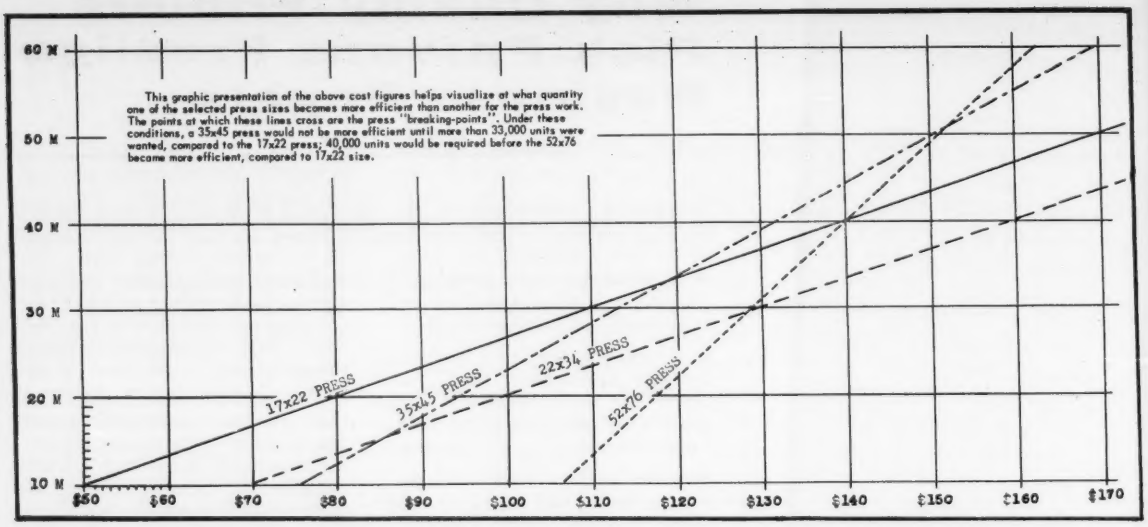
YOUR NAME.....

COMPANY.....

ADDRESS.....

STATE.....YOUR POSITION.....

11A1


This graphic presentation of the above cost figures helps visualize at what quantity one of the selected press sizes becomes more efficient than another for the press work. The points at which these lines cross are the press "breaking-points". Under these conditions, a 35x45 press would not be more efficient until more than 33,000 units were wanted, compared to the 17x22 press; 40,000 units would be required before the 52x76 became more efficient, compared to 17x22 size.
60 M
50 M
40 M
30 M
20 M
10 M
17x22 PRESS
35x45 PRESS
22x34 PRESS
52x76 PRESS
$50
$60
$70
$80
$90
$100
$110
$120
$130
$140
$150
$160
$170

NYU Has Litho Sales and Production Course

Advantages of the offset process and how it can be used for advertising production are discussed by New York University's evening Graphic Arts division in a course on Litho Sales and Production. The course offers the offset salesman that knowledge of his process which his best customers are now demanding—advice on the use of the process in the planning stages.

Reproduced from teaching material of this course is the graphic presentation (above) showing three cost factors determining the most efficient press size as to quantity, according to one set of figures used only as a pattern. The figures from which the graphs were plotted, said H. C. Latimer, instructor of the course, should not be interpreted as total costs or selling rates since about seven other cost factors are not included in the figure. A knowledge of how to figure "press breaking-points" is desirable, and, he adds, the other factors determining sheet size such as bindery economies, are covered. Registration for the Spring Term at N.Y.U. starts Jan. 23.

Canadian Shops Merge

Gerald M. Markham, president of The Federated Press, Ltd., and William E. Cartledge, president of Ronalds Printing Company, Ltd., both of Montreal, have announced that the two firms have been merged and the new company will be called Ronalds-Federated Ltd.

Federated Press was founded in 1908 and Ronalds in 1919. Both companies have facilities for offset lithography in Montreal, Toronto and Newmarket.

•

Good Year Despite Flood

Stockholders of Strathmore Paper Co. were told at the annual meeting in West Springfield, Mass. Dec. 19, that the Company had enjoyed a good year, both as to sales and net profit, despite extensive damage caused by the August 19 flood.

F. Nelson Bridgham, president, mentioned that although no water entered the Woronoco mills, the hydroelectric plant there was eleven feet under water, silt and gravel entered the power house at a depth of two feet, and the community of Woronoco was isolated for several days. The situation was even worse at the West Springfield mills.

The total cost of this flood will run 175-200 million dollars, not including the expense of loss of production, Mr. Bridgham said.

Harry E. Riggs, vice president in charge of sales, reported a substantial increase in sales over 1954.

A project is under way to move the laboratory and technical staff to a new location near the West Springfield mills and general offices.

The stockholders re-elected all of the directors at the annual meeting.

Dively Gives 1956 Outlook

"The United States is starting the New Year at the highest economical level in history, and there are signs of continuing strength," said George S. Dively, chairman and president, Harris-Seybold Co., in a recent statement. "Strong competitive selling conditions should prevail everywhere during the year, and of course, that is good for the graphic arts industry. Advertising is growing into a $10 billion industry, and commercial printing and lithography are essential tools of advertising and marketing."

Mr. Dively added that facilities for producing the company's products are in good shape, and that improved economic conditions abroad may make it desirable for Harris-Seybold to step up the activity of its International Division in 1956, including some European manufacturing.

•

Gorman Dies in Rochester

Fletcher G. Gorman, retired graphic arts technical representative for the Eastman Kodak Co., died Dec. 18, at his home in Rochester, N. Y., after a long illness. He was 51.

Mr. Gorman joined Kodak in January, 1947, serving as a graphic arts technical representative in Cleveland, Cincinnati, and Pittsburgh. For the past several years he has been concerned with the upstate New York territory.

He retired from the company last July.

Auto Accident Kills Robbins

Joseph M. Robbins, chairman of the board, Metropolitan Lithograph and Publishing Co., Everett, Mass., was killed instantly by an automobile, while Christmas shopping in Brookline, Mass., Dec. 24. He was 73.

Mr. Robbins was one of the founders of the Company, together with his two brothers, Harris M. Robbins, now president, and Harry I. Robbins, treasurer. The three brothers started their careers as newsboys and founded the Metropolitan News Co. in 1895. They began to print greeting cards, and in 1899 established the Metropolitan Lithograph and Publishing Co. Joseph M. Robbins was elevated to chairman of the board in 1955, and previously was president.

•

Institute Postpones Move

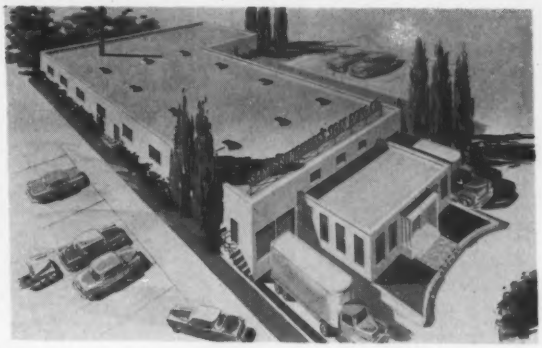
Moving day for the Chicago Lithographic Institute has been delayed indefinitely, Frank F. Oehme, general manager, announced last month. It had been expected that the new quarters leased for the school in Local 4's new building would be ready for occupancy at the start of the school's second semester. However, shortages of building materials, the severe weather and other complications have delayed construction, Mr. Oehme said. It may be possible to start installing equipment for the school in March and April and after everything mechanical is in place, it will be a simple matter to transfer classes from Glessner House without interruption of teaching schedules, he stated.

The Institute's second semester will open the first week in February at Glessner House and work on revision of all courses offered at the Institute has been continuing. Audio visual materials for the stripping operation have been completed and work has begun on another A-V for plate making classes. Mr. Oehme anticipated that within two years all instruction will be on an audio-visual basis.

The Institute's contract with the Army Air Force for training 90 litho technicians was completed last October and at a board meeting in December another contract, effective Jan. 1, was signed for training another detachment of 30 air force litho men.

Roller Factory Opened In Arkansas by Sam'l Bingham's Son

Sam'l Bingham's Son Mfg. Co. announced the opening this month of a new rubber roller factory in Searcy, Ark. The 25,000 square foot building was constructed so that all operations would be on one level. By locating its new rubber factory in Arkansas, the company will save southern printers freight rates, it was said.



Paper Mfrs. Trade Ads Listed

Paper Manufacturers Co., Philadelphia, has given, in its recent sales research bulletin, a breakdown of circulation of their advertising in trade magazines in 1955. This move is part of a company program to create new selling tools and to keep employees briefed on company activities.

•

Harris Buys W. Coast Platemaker

Harris-Seybold Co., Cleveland, purchased Lithoplate, Inc., California manufacturer of ready-to-print photo offset printing plates, through an exchange of stock, it was announced Jan. 5. George S. Dively, chairman and president of Harris-Seybold, said Lithoplate would operate as a wholly-owned subsidiary. Included in the purchase was Lithoplate's sales subsidiary, Alum-O-Lite.

•

R. B. Upham, Jr. *Paul A. Meyer*

Calvert Ups Officers

Charles F. King, president of The Calvert Lithographing Co., Detroit, has announced the following appointments: Robert B. Upham, Jr., formerly manager, advertising sales, to vice president in charge of advertising sales and director of the company; and Paul A. Meyer to treasurer.

The company is looking forward to its 100th anniversary in 1960 under independent ownership.

Hensel Named GAF Vice Pres.

Walter A. Hensel was elected vice president of General Aniline & Film Corp. at a meeting of the board of directors, it was announced Dec. 29. He will continue as general manager of the Company's Ozalid division with headquarters at Johnson City, N. Y.

Mr. Hensel first joined General Aniline as a finance executive in the Ansco division in 1946, and thereafter served as controller of the Ozalid division.

•

Midwest Plate Grainer Moves

The St. Louis Plate Graining Co., moved to its new one story plant in St. Louis last month.

The plant, which occupies 5,000 square feet of floor space, includes special plate graining machinery designed and built by the K & M Machine Works, St. Louis, according to E. E. Fickenwirth, president.

•

Elish has New Direct Mail

M. M. Elish & Co., Inc., New York City has released the first of its new mill brand paper, direct mail series, with twenty-four more to follow at two week mailing intervals; a total of more than 50,000 due to arrive at the printer in a twelve month period.

This mailing by the New York paper merchants consists of a two-color letterhead containing a typed message pointing out the highlights of a specific mill brand paper, a 11 x 17 sample of the stock, folded to 8½ x 11, properly identified, a self-addressed, "no postage required" return postcard inviting additional samples or further information, and a printed backer or stiffener.

The Miehle

Miehle 38, 41, and 49 Offsets are being installed in lithographic and combination plants in ever increasing numbers. In a remarkably short time, these offsets have established a record and reputation that is unsurpassed—they are the accepted standard of medium sized offset equipment.

Performance is the reason...

Throughout the Country It's . . .

The Miehle

38, 41 and 49 OFFSETS

The following list is representative of the many outstanding plants from coast to coast which now operate Miehle 38, 41 or 49 Single and Two-Color Offset Presses.

Abbott, Kerns & Bell Company
Portland, Oreg.

Allen's Litho. Trade Plant
Atlanta, Ga.

Augsburg Publ. House, Inc.
Minneapolis, Minn.

The James H. Barry Company
San Francisco, Calif.

Buck Printing Company, Inc.
Boston, Mass.

Rufus H. Darby Prtg. Co., Inc.
Washington, D. C.

The Gibson Art Company
Cincinnati, Ohio

The Inland Press
Detroit, Mich.

D. F. Keller Company
Chicago, Ill.

Label Service Corporation
Chicago, Ill.

LaSalle Litho. Corporation
New York, N. Y.

Masura Offset Company
Dearborn, Mich.

Newsfoto Publishing Company
San Angelo, Tex.

Puertner Lithographing Company
Denver, Colo.

Standard Litho. Company, Inc.
Los Angeles, Calif.

Standard Prtg. & Litho., Inc.
Tulsa, Okla.

Max Stern's Sons Company
Chicago, Ill.

The John B. Watkins Company
New York, N. Y.

Weber Litho. Company
Chicago, Ill.

Williams & Marcus Co., Inc.
Philadelphia, Pa.

Winston Printing Company, Inc.
Winston-Salem, N. C.

Write for complete information

MIEHLE PRINTING PRESS AND MANUFACTURING COMPANY

Chicago 8, Illinois

I. S. Berlin to Spend Million

I. S. Berlin Press, Chicago, have announced an expansion plan for 1956 providing for a substantial increase in production capacity costing over one million dollars. Facilities will be expanded in the pressroom, bindery, camera department and operations in color processing and lithographic plate-making, and material handling.

I. S. Berlin, founder and president of the company, expressed the view that a survey he recently made in Chicago and other areas indicates the required increase in manufacturing capacity to provide for more advertising literature in color, and other lithographic printing for present customers and prospects.

The company erected its present air-conditioned building six years ago with 145,000 square feet of floor area; and two years ago, built an addition with 43,000 square feet, totaling 188,000 square feet of floor space.

Added pressroom equipment includes two large Miehle 2-color presses, which, with the one 2-color 76 inch offset press just installed, makes a total of 28 Harris and Miehle offset presses with 51 color units, in operation, night and day. The first 4-color 76 inch offset was installed soon after the I. S. Berlin Press moved into its newly erected plant six years ago. The second and third 4-color presses followed within three years, and a 3-color Miehle offset press was installed six months ago.

In the enlarged bindery, three of the twelve folding machines are being replaced with two more modern machines of increased capacity; an additional new Model KK Cleveland folder —44 x 58—is being installed; also a Christensen 4-station automatic saddle-stitcher, equipped with a 5-knife trimmer. Added to the present line-up of paper cutting machines is an 85 inch Seybold paper cutter.

•

Hoover Gets C. of C. Post

George R. Hoover, executive vice president, Joseph Hoover & Sons Co., Philadelphia, has been elected a member of the board of directors of the Chamber of Commerce of Greater Philadelphia.

Sodano With Lawson

Gerard A. Sodano has joined the eastern sales division of E. P. Lawson Co., New York, it was announced last month. Mr. Sodano comes to Lawson from Felt and Tarrant Mfg. Co., Chicago.

•

Whitmore Heads Hospital Drive

Edward K. Whitmore, president of Oberly & Newell Lithograph Corp., New York, and a former president of the Point-of-Purchase Advertising Institute, Inc., is chairman of the Printing and Lithography division of the United Hospital Fund's seventy-sixth annual fund-raising appeal.

The United Hopsital Fund's 1955 campaign goal is $3,500,000, which will be distributed to its eighty-two member hospitals.

•

Execs Get Stecher-Traung Stock

Common stockholders of Stecher-Traung Lithograph Corp., Rochester, N. Y., have approved a restricted stock option plan as incentive to top executives, the company announced last month.

The plan reserves 15,935 shares of authorized but unissued common stock for options to be granted employes whose annual base salary is $20,000 or more and to certain other employees whose salaries exceed $15,000 but do not equal $20,000.

The board of directors is authorized to grant to each eligible employe an option to buy 50 shares of stock for each $1,000 of base salary at a price 95 percent of the fair market value at the time the option is granted.

•

Driver Elected Vice President

Election of H. Thomas Driver as vice president of Batt, Bates and Co., Wash., D. C., was announced Dec. 21 by Dial H. Elkins, president.

Mr. Driver has been general manager of the firm since Jan. 1955, and he will continue to serve in this capacity. He joined Batt, Bates and Co. in March, 1952 as supervisor of the firm's offset department. Mr. Driver is also secretary of the Washington Litho Club.

George Hantscho

E. G. Ryan

Graphic Arts Machinery Is Now George Hantscho Co.

Graphic Arts Machinery, Inc., of Mount Vernon, N. Y. announces that its name and address has been changed to: George Hantscho Company, Inc., with George Hantscho remaining as president and E. G. Ryan of Chicago as vice president in charge of sales.

The company designs and builds a complete line of roll fed offset and letterpress (including rubber plate) presses for the publications field, the specialty field (place mats and gift wraps) and the business forms industry, including presses for snapouts and continuous forms.

Mr. Hantscho was associated with J. F. Webendorfer in the original Webendorfer-Wills Co.; then became factory and general manager of the Webendorfer division of American Type Founders.

Mr. Ryan is president of E. G. Ryan & Company of Chicago, printing machinery dealers. He was associated with the Webendorfer-Wills Co. 25 years ago, and subsequently became midwest manager for the Mt. Vernon web division of American Type Founders.

The new plant of the George Hantscho Co. is triple the size of the old plant.

Rolf Hantscho, son of the president, is a member of the engineering staff.

St. Regis Buys Gummed Products

St. Regis Paper Co. has announced that it is acquiring all the capital stock of The Gummed Products Co., Troy, Ohio, through the acceptance of an offer of exchange of its common stock for Gummed Products stock. The Gummed Products Co. will operate as a subsidiary of St. Regis, with its present organization and management.

Gummed Products, founded in 1914, not only is a producer of all types of gummed products but also is a laminator of foils and films to paper and paperboard.

Roth F. Herrlinger, president and Paul W. Herrlinger, executive vice president, own all of the capital stock of Gummed Products and will continue in their present capacities in the operation of the company, it was stated. In addition to its plant at Troy, Ohio, the company maintains branch sales office in New York and Chicago. Sales of Gummed Products Co. are currently running at an annual level of approximately $7,000,000. About 250 persons are employed in its operations.

•

L. A. Voters' Lists Going Offset

Los Angeles County voters' lists are expected to be produced by cold type and offset early in 1956, despite an appeal being made following a denial of an injunction against this type of reproduction. The injunction, sought by two Los Angeles voters, was denied by the Superior Court. The county has a contract with Bilfred Enterprises to handle the lithographic reproduction.

Rossell Scores Profit Decline

"With each succeeding year since 1946, the average profit from the sales dollar has dwindled almost 50 percent in the graphic arts industry," declared Robert E. Rossell, managing director, Research and Engineering Council of the Graphic Arts Industry. Speaking at a meeting of the Lehigh Valley Club of Printing House Craftsmen, recently, Mr. Rossell continued that, "There are two main reasons for this dangerous decline: one is the tremendous increase in costs in our industry, and the second reason is the condition of the present market."

"Whatever this market is called, it is a market in which our customers are shopping around more and more for better prices. Consequently, in order to get the business and increase our profits it is necessary for management to meet this demand. A major concern of the Research and Engineering Council is, 'What can be done about it?' More specifically, what must management do to combat this problem?"

Progressive and prudent management is the most important element in any business, Mr. Rossell declared, and listed six important areas in which management must be kept informed: prudent financial management; keeping up-to-date in ideas; keeping up-to-date with equipment; sensible competitive pricing; specialization, human relations, training programs; and research.

•

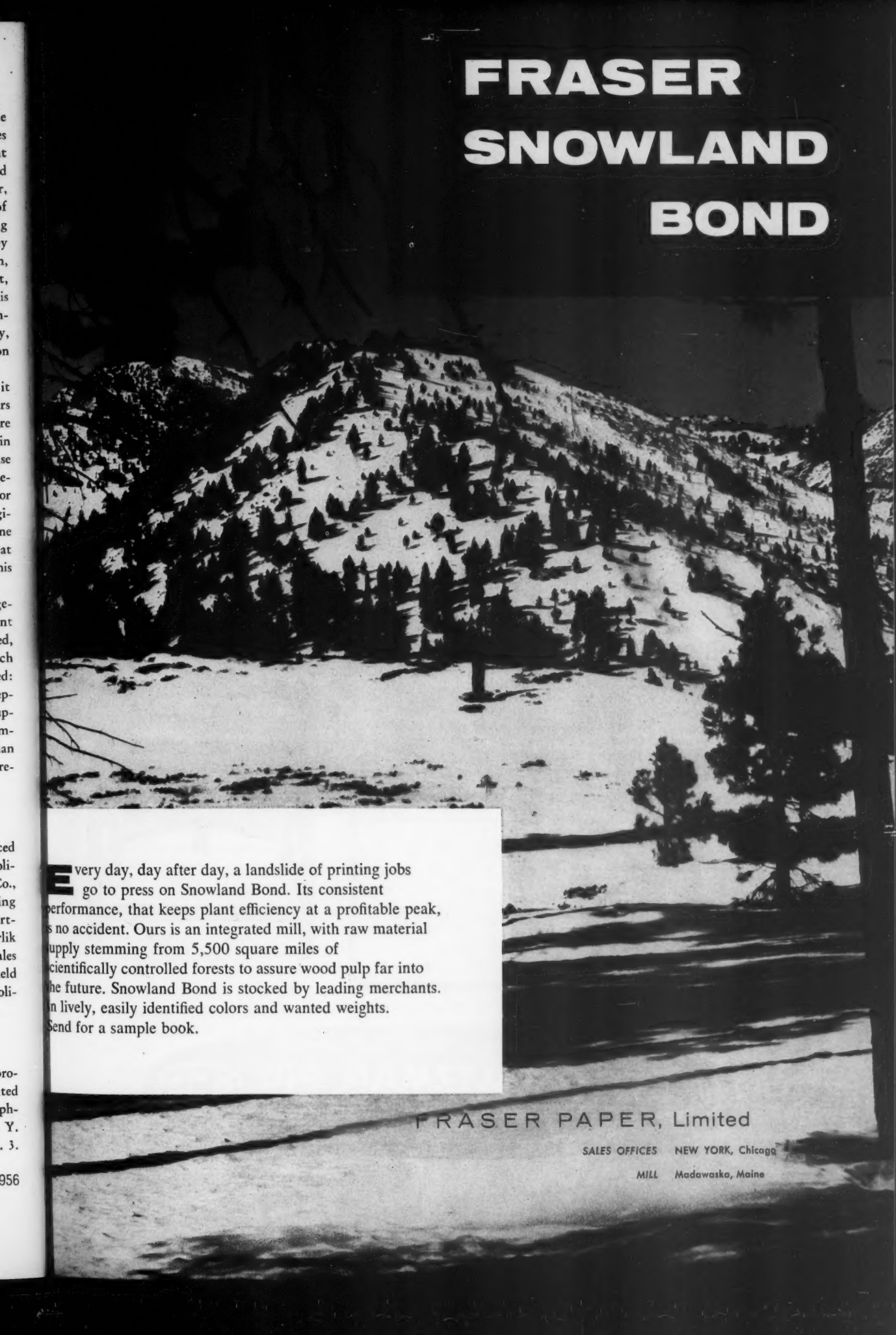
Anderlik is Ad Manager

Joseph Anderlik has been advanced to advertising manager of Consolidated Water Power and Paper Co., Wisconsin Rapids, Wisc., according to an announcement by Harold Murtfeldt, sales manager. Mr. Anderlik will also continue his duties as sales promotion manager, a post he has held for the past three years at Consolidated.

•

Brett Names Soman

Alfred Soman, formerly sales promotion manager, has been appointed sales manager of the Brett Lithographing Co. of Long Island City, N. Y. The appointment was effective Jan. 3.

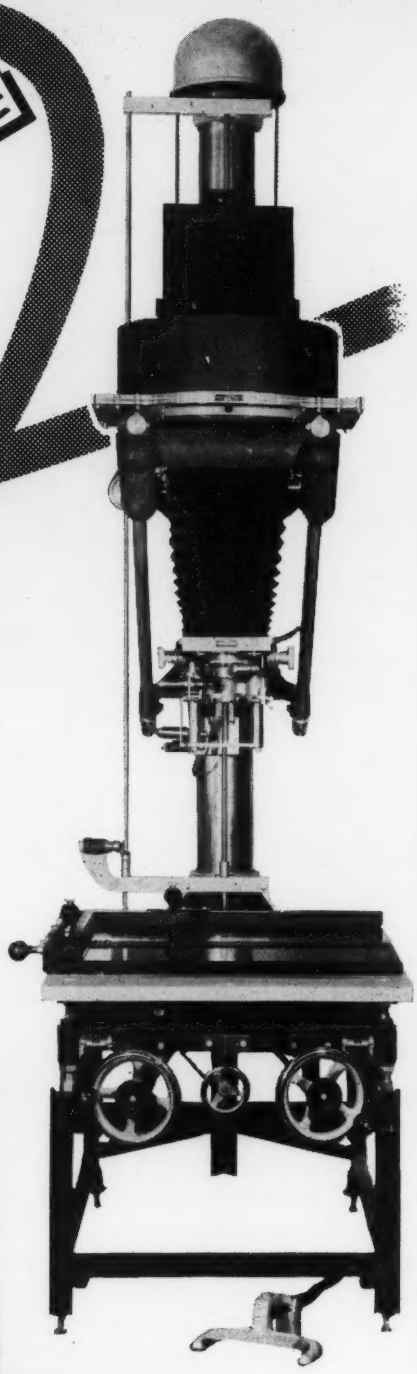

FRASER
SNOWLAND
BOND
Every day, day after day, a landslide of printing jobs go to press on Snowland Bond. Its consistent performance, that keeps plant efficiency at a profitable peak, is no accident. Ours is an integrated mill, with raw material supply stemming from 5,500 square miles of scientifically controlled forests to assure wood pulp far into the future. Snowland Bond is stocked by leading merchants. In lively, easily identified colors and wanted weights. Send for a sample book.
FRASER PAPER, Limited
SALES OFFICES NEW YORK, Chicago
MILL Madawaska, Maine

VERSATILE

DEPENDABLE

ACCURATE

CAESAR-SALTZMAN CONDENSER TYPE ENLARGER



Here's our answer to your demands for a Caesar-Saltzman Enlarger with Condenser Light Source. We have added to the sturdy, time proven Enlarger a flexible Condenser Light Source which is the product of much research and experimentation. The Enlarger with condenser Light Source has been thoroughly tested by some of the top men in the professional field and their verdict is "everything we asked for and more."

Accessories Available:

- **Three Point Glass Negative or Peg Registration System**
- **Lenses of Short Focal Length for Reductions**
- **Cones of Various Lengths for Reductions**
- **Variac for Control of Light and Kelvin Output for Color Separations**
- **Electronic Timer**
- **Special Positive Interlocking Lens and Camera Motion**
- **Precision Reducing Negative Holders**
- **Vacuum Easel and Vacuum Pump**

PARTIAL LIST OF USERS

Daily News New York, N. Y.	Western Lithographing Co. St. Louis, Mo.	Consolidated Vultee Aircraft Corp. San Diego, Calif.
Process Litho Chicago, Ill.	Krug Litho Arts Co. Kansas City, Mo.	Dept. of National Defense Ottawa, Canada
Rochester Institute of Tech. Rochester, N. Y.	San Francisco Police Dept. San Francisco, Calif.	Wm. Becker Studio New York, N. Y.
Pringle & Booth, Ltd. Toronto, Canada	Commercial Printers Columbus, Ga.	King Studio Chicago, Ill.
C. F. Braun & Co. Alhambra, Calif.	Courier Journal & Louisville Times Louisville, Ky.	Miami Herald Publishing Co. Miami, Florida
McCalls Magazine Stamford, Conn.	The Osborne Co. Clifton, N. Y.	Shorecotor New York, N. Y.
Knapp Engraving New York, N. Y.	Eastman-Kodak Rochester, N. Y.	Army Chemical Center Edgewood, Maryland

Write For Complete Literature

Headquarters for Professional Photographic Equipment Since 1920

CPS **J. G. SALTZMAN, INC.** CPS

SALES DISTRIBUTORS for CAESAR MANUFACTURING, INC.

480 Lexington Avenue, New York 17, N. Y.

LNA Mails Awards Entry Blanks

Lithographers National Association sent 25,000 invitations to enter specimens of their finest lithography produced in 1955 early this month to national advertisers and the lithographic industry in all parts of the country. A four-color process announcement brochure, prepared by Tanner-Brown, Inc., Long Island City, N. Y., together with entry blanks for the 6th Awards Competition, were distributed, according to George P. Hughes, Kindred, MacLean & Co., chairman of the LNA promotion committee.

Mr. Hughes foresees a considerable increase in the 2,670 specimens of lithographic material which were entered in the 1955 Competition. He noted that the exhibit tour this year has broken all attendance records during its showing in 20 principal cities.

Deadline for entries is Feb. 24. Announcement brochures, containing the rules and regulations of the Competition, and entry blanks are available on request by writing to Lithographers National Association, 420 Lexington Ave., New York 17, or 127 N. Dearborn St., Chicago 2.

This year the LNA Promotion Committee has eliminated first, second and third awards and honorable mentions and has supplanted these with six awards of equal distinction in each of the 45 classifications of lithographed material for judging. Certificates of Award will be issued to the winners, including the principal advertiser, publisher, client, etc., the offset lithographer, the advertising agency and to the person making the entry if not connected with one of the foregoing.

Several classification changes were announced by the promotion committee: "Direct Mail Advertising," has been redesignated "Direct Mail and Sales Service Literature" and a new sub-classification, "A-7 Miscellaneous —Envelope Inserts, etc." has been added as a catchall for small pieces of direct mail which cannot successfully compete against the more elaborate folders and broadsides, booklets and pamphlets.

The Committee also has approved acceptance of entries in "O-1 Decalcomanias" classification consisting of 50 percent lithography and 50 percent silk screen. In the future, all entries in "P-1 Metal Lithography" will be limited to flat metal specimens, eliminating the acceptance of end-use specimens.

Royer and Roger, Inc., New York City, will design the 6th Award Cata-

log which contains illustrations and credits of the prizewinning selections. The Catalog, which will include lithographers' and suppliers' advertising, will be mailed to 30,000 firms and distributed at the LNA Convention, Drake Hotel, Chicago, May 10-12, where the formal announcement of winners will be made, and also during the exhibition of winners, June 4 to 8 at the Madison Hotel in New York City.

Members of the Promotion Committee in charge of details for the 6th Competition include Ralph D. Cole, president, Consolidated Lithographing Corp., Carle Place, N. Y.; U. Gordon Colson, president, U. O. Colson Co., Paris, Ill.; Vernon K. Evans, president, The Veritone Co., Chicago; Albert Hailparn, president, Einson-Freeman Co., Inc., Long Island City, N. Y.; Thomas P. Mahoney, vice-president, The Regensteiner Corp., Chicago; Howard C. Minnich, adv. and sales promotion, The United States Printing & Lithograph Co., Cincinnati, C. A. Nordberg, president, Chicago Offset Printing Co., Chicago.

Also, Edward E. Peterson, director, research and marketing services, The Forbes Lithograph Mfg. Co., Boston; Alfred B. Rode, Jr., general manager, New York office of The Stecher-Traung Lithograph Corp.; Lorenz L. Schmidt, general sales manager, Schmidt Lithograph Co., San Francisco; George J. Walsh, president, Offset Engravers Associates, Inc., New York; Edward K. Whitmore, president, Oberly & Newell Lithograph Corp., New York, and John M. Wolff, Jr., executive committee representative, vice-president, Southwestern Div., Western Printing & Litho. Co., St. Louis, Mo. and Herbert W. Morse, promotion director, LNA New York office.

Jewett Advanced by 3M

Clifford L. Jewett has been named general manufacturing manager of the printing products division, Minnesota Mining & Manufacturing Co., St. Paul, Minn., it was announced Dec. 8.

For the past five years Mr. Jewett had been the division's technical director. He joined 3M in 1932 as a research chemist in the company's roofing granule laboratory and in 1945 he was assigned to the new products division as a product development engineer.

•

Montreal Printing Week in March

Celebration of Printing Week will be held in Montreal from March 18-24 instead of the week in January designated in the U. S. Climatic conditions and the proximity of the Christmas and New Year holidays were the reasons given for the choice of dates. Maurice Wright, *Reader's Digest*, is chairman of the Montreal committee.

•

Stecher-Traung Ups Execs.

Advancement of two Rochester, N. Y. men to new executive positions at Stecher-Traung Lithograph Corp. was announced at a meeting of the board of directors in San Francisco, last month. Vice president Richard C. Alden was named first vice president, and W. Bayard McCoy, a Stecher-Traung manager, was named vice president in charge of sales of the Rochester division.

Three San Francisco men also gained advancement. Ralph J. Wrenn was elected executive vice president, Leo P. Blank was named vice president in charge of sales for the San Francisco division, and Frank T. Sheedy was made vice president in charge of San Francisco production. All other officers were re-elected at the meeting.

•

Fieweger Dies in Illinois

Morey W. Fieweger, senior enamel paper sales representative of Consolidated Water Power & Paper Co., died at his home in Evanston, Ill. Dec. 16. He was 57.

Mr. Fieweger joined Consolidated as a sales representative in 1935.

ATF Names Robt. Garty

Appointment of Robert F. Garty as assistant to D. G. Manley, sales manager, Sheet-fed and Resale Products division, American Type Founders, Inc. has been announced by R. A. Tobias, vice president of sales. Mr. Garty has sold graphic arts equipment in New Jersey, and, prior to joining ATF, was in the sales department and later was production manager of a large New York City lithographic plant.

•

More Showings of LNA Awards

Five additional showings of LNA's Traveling Awards Exhibit, comprising the 267 awards winners in the 5th Lithographic Awards Competition, have been scheduled in 1956. This brings the total number of exhibitions in all parts of the country to 21, a new record for this annual promotion of the lithographic process.

The schedule for the months of January and February is: Jan. 16, San Francisco, Calif., sponsored by LNA members in San Francisco; Jan. 23, Los Angeles, Calif., sponsored by lithographers affiliated with Printing Industries of Los Angeles; Jan. 30, Phoenix, Ariz., sponsored by Printing House Craftsmen of Phoenix; Feb. 6, Albuquerque, N. Mex., sponsored by Printing House Craftsmen; Feb. 13, Oklahoma City, Okla, sponsored by Semco Color Press.

Negotiations are underway to bring the exhibit to San Antonio and Houston, Bridgeport, Conn. and Columbus, Ohio.

•

Poole Bros. P.A. Dies

Albert H. Reinhart, purchasing agent for Poole Bros., Inc., Chicago combination plant, died Dec. 10. He was 76 and had been associated with the company for 53 years.

•

Lithography Story in Quarterly

Interchemical Review, published quarterly by the Research Laboratories of Interchemical Corp., features lithography in its lead article in the autumn edition. "Lithography-Modern Stone Writing," by Frank R. Wright describes the fundamental principles on which lithography is based, and traces the early history of the process. Metal decoration by lithography is also included in the review.

•

Hutchinson Heads Polio Drive

Donald S. Hutchinson, vice-president in charge of sales at Lutz & Sheinkman, New York, has been named chairman of the Lithographers Division's campaign for the 1956 Greater New York $3 million Appeal of the National Foundation for Infantile Paralysis. A committee of trade leaders met with Mr. Hutchinson at the Hotel Roosevelt Dec. 8, and planned for industry-wide participation in the March of Dimes appeal. Mr. Hutchinson was also recently re-elected president of the Point of Purchase Advertising Institute.

•

Direct Mail Up for 10 Months

Direct mail advertising is expected to show a new all-time high in dollar volume in 1955. January through October, 1955 volume of $1,155,557,189 as against $1,086,029,350 for 1954 represented a gain of 6.42%, it was announced by George V. Rumage, managing director, Direct Mail Advertising Association. The outlook for 1956 is for continued gains.

As mailing lists became bigger as a result of growth of total population, and expansion of industry, the use of direct mail kept pace with other advertising media, in serving American business. Manufacturers, principally motor car makers, relied heavily on direct mail to reach an all-time high in sales. Retailers too made increased use of direct mail, via store catalogs, as well as individual mailings, on a more intensive basis.

The greater use of credit and charge accounts for all purposes, has made available millions of names of individuals and companies, which are useful for direct mail advertising, Mr. Rumage said. The Association now has 2,600 members, 20 percent greater than last year.

The first Direct Mail Advertising Management Institute was established at the University of Illinois in 1955 and will be continued annually, it was stated.

Flint Is NPIRI President

Robert Flint has recently been elected president of the National Printing Ink Research Institute, at Lehigh University. Mr. Flint is treasurer of the Howard Flint Ink Co., Detroit.

The National Printing Ink Research Institute, cooperative research institute sponsored by the National Association of Printing Ink Makers, conducts fundamental research in printing ink technology.

•

West Coast Wages Up

Increased wages are provided for in the new contract signed by the San Francisco Employing Lithographers Assn. and the Amalgamated Lithographers of America, Local 17. The contract runs from Oct. 24, 1955 to Oct. 21, 1957, and carries provision for wage raises of 10 cents an hour for journeymen and 8 cents an hour for semi-skilled workers, as of last Oct. 24. In addition, in Oct. 1956 there will be another raise of 8 cents for journeymen and 6 cents for semi-skilled workers. The new contract also provides three-week vacations after two instead of three years' employment, as was the case previously. The amount paid by employers into the welfare fund has been raised 25 cents per week per employee to $2.25. An additional 25 cent raise will go into effect next October.

Other ALA Northern California and Nevada lithographic plants are signing similar contracts, it is reported.

•

Echele is Director of Ad Typog.

Hube Echele, president of Warwick Typographers, St. Louis, was elected to a three-year term on the board of directors of the Advertising Typographers Association of America, Inc., at the Association's recent meeting in New York.

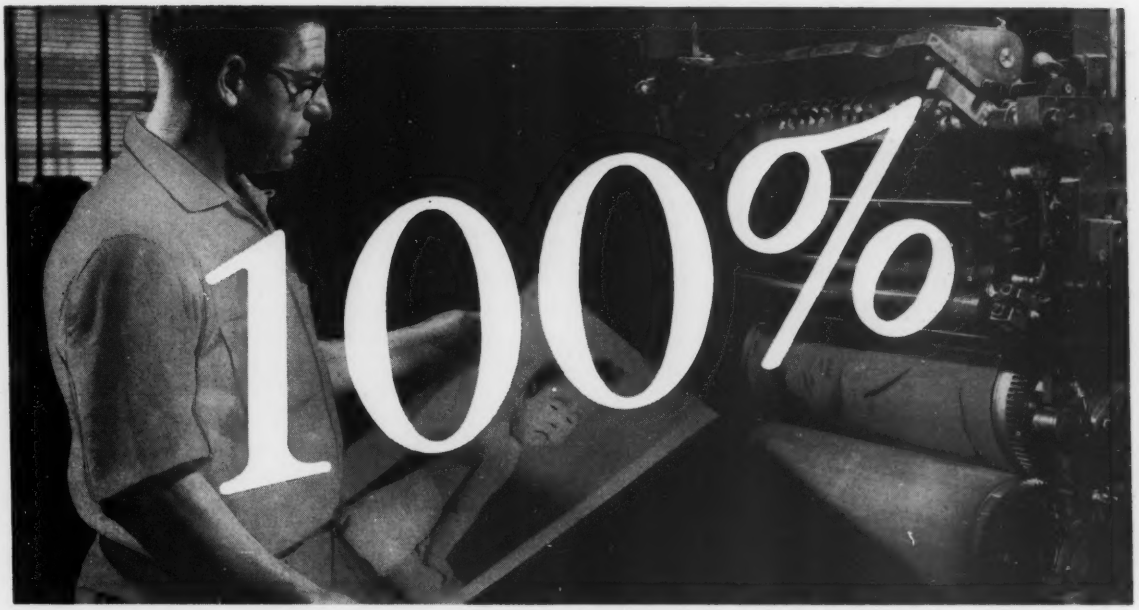
•

Calif. to Bid for '58 Convention

An invitation to hold the 1958 International Typographical Union convention in San Francisco will be extended by San Francisco Typographical Union No. 21. The group plans to offer the suggestion at the Colorado Springs meeting, next October.

Quality Lithography Depends on the Plate

You Can't Beat 100%



3M Plates...From Package to Print...With 100% Efficiency

Here's the time and money-saving story being told by many experienced pressmen across the country: you can't beat the efficiency built into 3M Brand Photo Offset Plates.

100% consistent, 3M Plates offer the solution to over 50 costly variables found in zinc plates; variables that take the punch—and often the profit—out of many lithographic jobs.

Pre-Sensitized All-Aluminum 3M Plates were born of research. They were developed specifically to help eliminate such inherent disadvantages of zinc plates as distortion caused by grain patterns, inconsistency in thickness, varying exposure times, scumming and oxidization, and dozens of other problems. You not only can count on 100% performance from 3M Plates . . . but on the flawlessly-smooth, *grainless* 3M Plates to provide the perfect surface for superior quality lithography.

Yes, in city after city—the story's the same—you can't beat the 100% efficiency of 3M Plates. This proof of performance has made 3M the world's largest selling pre-sensitized lithographic plates. Put 3M Plates on *your* presses.

MAIL THIS COUPON TODAY

MINNESOTA MINING AND MANUFACTURING CO., DEPT. DY-16L, ST. PAUL 6, MINN.

BEARER DIAMOND TEST STENCILS supplied at your 3M PLATE REPRESENTATIVE

3M BRAND Photo Offset Plates

FREE! Please send me, without cost or obligation, useful Bearer Test Stencils and literature giving complete information on the use of 3M Plates.

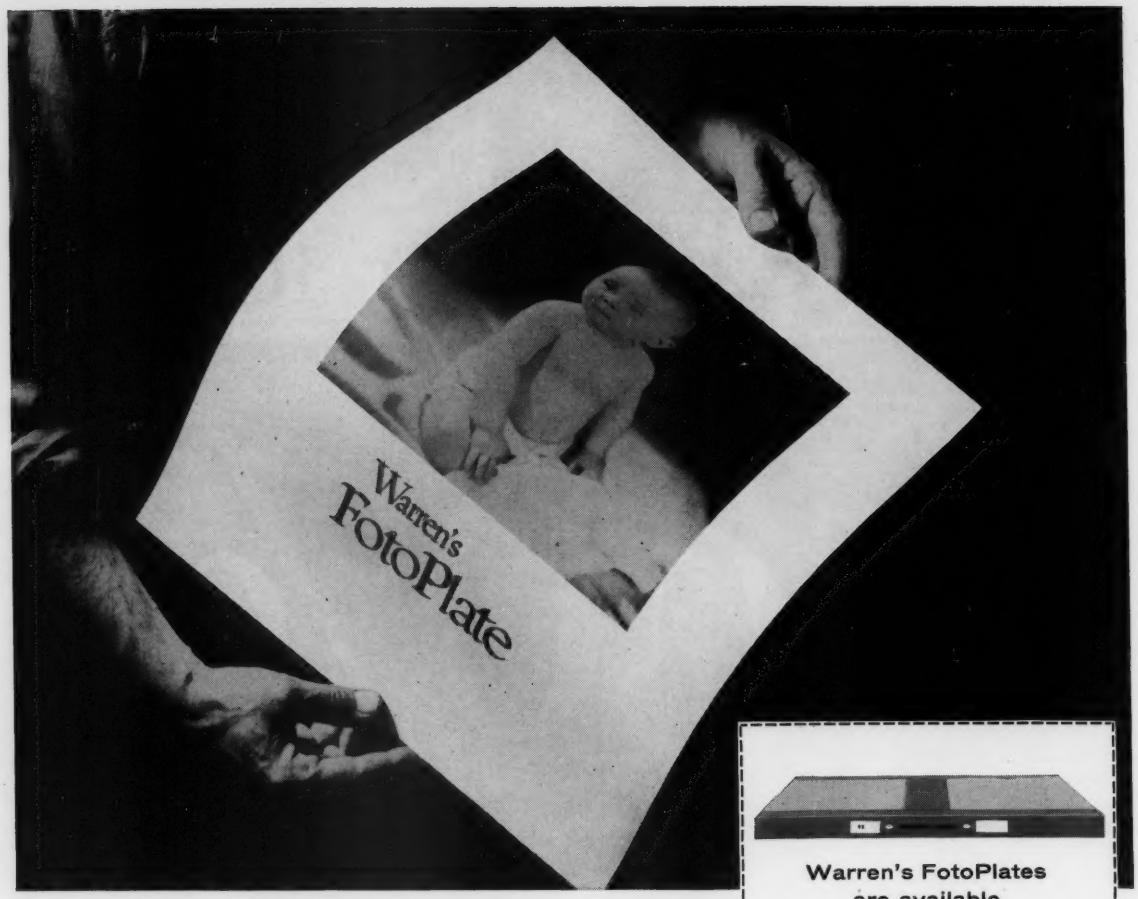
We have_____ Presses. Position_____

Name_____ Company_____

Address_____ City_____ State_____

PRODUCT OF 3M RESEARCH

"3M" is a registered trademark of Minnesota Mining and Manufacturing Co., St. Paul 6, Minnesota. General Export: 99 Park Ave., New York 16, N. Y. In Canada: London, Ontario.



Warren's FotoPlate

(PRESENSITIZED LITHOGRAPHIC PLATE)

GIVES YOU A TRIPLE ADVANTAGE

1. *It delivers the finest reproductions of halftones.*
2. *Does this with economy.*
3. *And does this with speed and ease.*

Warren's *FotoPlate* possesses excellent dimensional stability. Lithographers like *FotoPlate* because no special technique is required. With *FotoPlate*, more good plates can be made and on press in a working day.

Investigate the advantages of *FotoPlate* for yourself. Get further details and special instruction booklet from any FotoPlate distributor, or communicate with manufacturer's headquarters: *S. D. Warren Company, 89 Broad Street, Boston 1, Massachusetts.*

Warren's FotoPlates are available in the following sizes

Twenty-five plates to a package.
Four packages (100 plates) to a carton.

10 x 16	27¼ x 28⅝
17½ x 16	27¼ x 30
15¾ x 20½	26¾ x 31
20 x 22¾	25½ x 36
19¾ x 23	26¾ x 36
19⅞ x 24⅝	29½ x 36
22½ x 30	30¼ x 35
24⅝ x 30	32 x 41

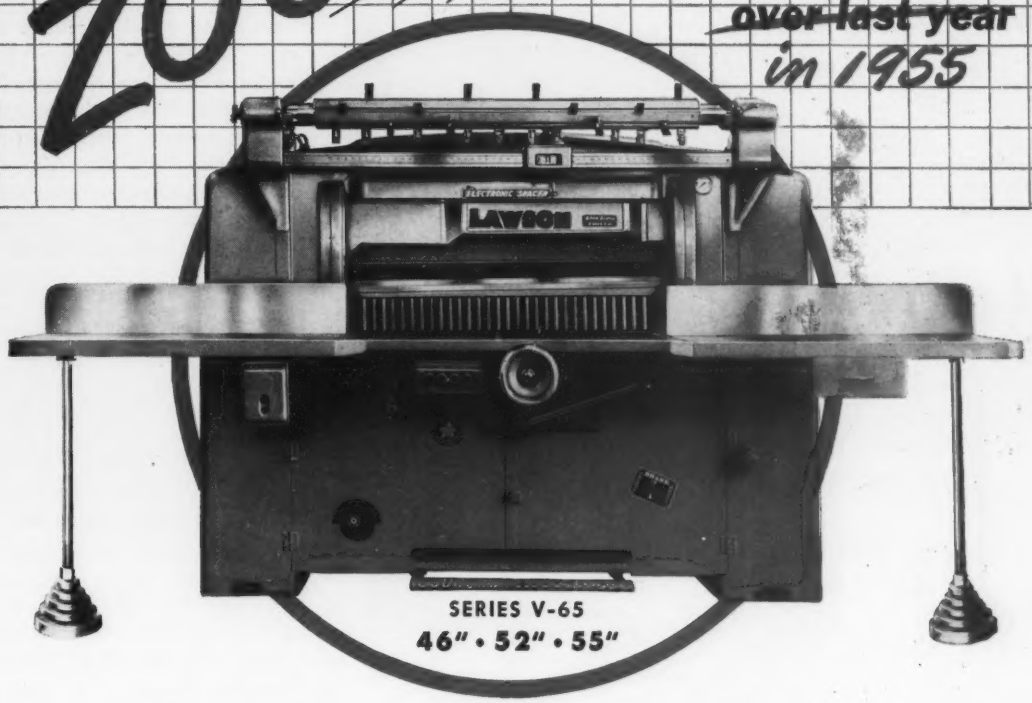
32½ x 43

Warren's STANDARD

LAWSON CUTTER SALES

ZOOMING

60%
~~35%~~
increase
~~over last year~~
in 1955



SERIES V-65
46" • 52" • 55"

Why has the industry gone Lawson?

Because . . . Lawson in (1947) pioneered the *standardization* of cutters — making it possible to add an Electronic Spacer or Motor Operated Back Gauge right on the customer's floor.

Because . . . Lawson Cutters (since 1947) . . . feature Hydraulic Cushioned Clamping, pioneered successfully by Lawson. Accurately cut all types of paper without disturbing the pile.

Because . . . Lawson (in 1949) . . . introduced the exclusive Electronic Spacer. This applied electronics to speed up paper cutting production — assures accuracy to .002".

Because . . . more Lawson Hydraulic Clamp Cutters are now in operation than all other makes combined — proof of their extreme accuracy, greater safety, and increased production.

See the new Series "V-65" — the ultimate in Hydraulic Clamp Cutters and Electronic Spacers. Write today for illustrated folder.

E. P. LAWSON CO. main office: 426 WEST 33rd ST., NEW YORK 1

CHICAGO: 628 SO. DEARBORN ST. BOSTON: 176 FEDERAL ST. PHILADELPHIA: BOURSE BUILDING

Pollack, Besig Merge

Merger of the H. Wm. Pollack Poster Print Inc., and Besig & Co. Inc., both of Buffalo, N. Y., has been announced. The new company will be known as Pollack Poster Print Inc., with a Besig lithograph division.

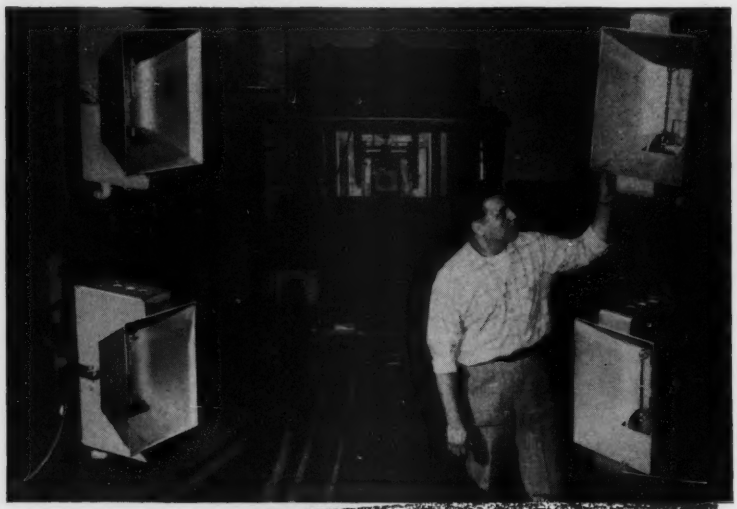
Officers are: president, Alvin E. Backes; vice president and general manager, Victor K. Besig; secretary, Thomas I. McElvein; and treasurer, Daniel Joseph. Mrs. Adelia Pollack will continue as chairman of the board.

The Pollack Co. was founded in 1917 by H. William Pollack who died in 1945. Mr. Backes became president last year. Besig & Co. was established in 1942.

•

Taube is Market Research Mgr.

Clarke W. Taube has been appointed to the newly created position of market research manager of Miehle Printing Press & Mfg. Co., it was announced Dec. 12, by Carlton Mellick, vice president of sales. Mr. Taube had been a market analyst in the paper products field prior to joining Miehle.



"I wish we had these Macbeth lamps sooner!"

says Joe Petrowsky, Spaulding-Moss, Boston

Joe Petrowsky's word counts with a camera expert like Joe Petrowsky. And he's sure pleased with the performance of this battery of four Macbeth *Constant*arc lamps at the Spaulding-Moss litho plant in Boston.

"I set my lights for a job and forget them—no more fluctuation worries. And I cut about one-third from the exposure I used before."

He tells about a "coverage test" in which light-meter readings were taken at various spots. These tests were repeated at three-hour intervals without registering any fluctuations. "What especially pleases me," says Joe Petrowsky, "is the light is so even. *Constant*arc is the right name!"

The advantages of the Macbeth *Constant*arc are soon obvious to the man in the shop—and to the man in the front office concerned with the costs and profits involved in *quality* work. So, it will pay *you* to bring your arc lamp problems to Macbeth. We can supply the right lamp for *your* operation whether it's lithography, photo-engraving, gravure, or blueprinting. See your dealer, or write us, *today*.

MACBETH ARC LAMP COMPANY, 141 Berkley St., Phila. 44, Pa.

AMA Books Available

Described as controls for the manufacturing executive, American Management Association has listed several texts available from the Association as follows:

Guides to Effective Production Management; Tested Approaches to Cutting Production Costs; Company Approaches to Production Problems; Production Guides and Controls for the Modern Executive; Organizing for Improved Production and Cost Control; Electronic Data Processing In Industry; Automation and Other Technological Advances. Getting the Most from Research and Engineering.

Adjusting to a Competitive Economy: The Human Problem; Rating Employee and Supervisory Performance; What's New on the Labor-Management Front?; Strategic Areas In Cost Reduction; Motivation: The Core of Management; Organization and Functions of the Safety Department; Guides to Meeting Tomorrow's Production Needs.

•

Eastern Oregon Goes Offset

La Grande, Oregon, got its first lithograph press last month when Eastern Oregon Review installed the first offset unit in its production line. Knight's O.K. Rubber Welders had the distinction of being the first local firm to have a job done on the press, a two-color letterhead.

•

LTF Schedules Meetings

The 1956 annual members' and directors' meetings of Lithographic Technical Foundation will be held Feb. 7 and 8 in New York City at the Lotos Club. These meetings will be concerned mainly with the annual election of new directors and officers and consideration of budgets and financial statements.

The Research and Educational committees will hold meetings later this year — Research, April 9-10 at the Conrad Hilton Hotel, Chicago, and the Educational Committee in May or June.

LTF directors will have a two-day mid-year meeting, probably in July, in Chicago which will be devoted to thorough consideration of the educational and research programs.

ONLY: OXY-DRY PRECISION ENGINEERING

GIVES YOU ALL THESE COMPETITIVE ADVANTAGES

GREATER PRESS SPEEDS
more impressions per hour

REDUCES REJECT SHEET WASTE
more deliverable sheets

PERMITS FULL PRESS LOADS
faster job handling time

USES LESS OFFSET POWDER
costs less to operate

FASTER SETTING & DRYING OF INK
less waiting time for next operation

ELIMINATES STATIC ELECTRICITY
"plumb-bob" jogging on press delivery

MUCH LESS SERVICE & MAINTENANCE
fill it...set it...forget it operation

ANY *one* of the above advantages would make OXY-DRY superior to any and all other offset prevention methods. Combined, they give the printing plant that has OXY-DRY equipment a tremendous competitive advantage that simply means more business, more profits and more satisfied customers.

If you want to increase the number of impressions per hour for every press in your plant, then you need OXY-DRY sprayers... write, wire or phone us today for more details.

OXY-DRY THE ONLY RIGHT INK OFFSET PREVENTION PROCESS

OXY-DRY SPRAYER CORPORATION

NEW YORK CHICAGO SAN FRANCISCO

320 South Marshfield Avenue, Dept. ML,
Chicago 12, Illinois

GET IT..

OXY-DRY SPRAYER CORPORATION
320 S. Marshfield Ave. Dept. ML
Chicago 12, Illinois

We are interested in OXY-DRY Sprayers;
send more information ☐
or your representative. ☐

Firm Name_____

Address_____

City_____ Zone____ State_____

Individual_____

FILL IT..

SET IT..

FORGET IT!

Outdoor Advertisers at Chicago Convention See Rosy Future

Outdoor Advertising Association of America announced at the convention a plan for use of its own medium, the lithographed poster, to sell outdoor advertising to more potential advertisers. Unveiled in Hotel Sherman's exhibition hall was this 24-sheet poster, produced as a part of a stepped-up promotional program.

Space for imprinting user's name is provided along the lower margin of the poster. Gugler Litho Co., Milwaukee, Wis., produced this 4-color poster for OAAA, with a first run of 5,000 copies. Within an hour immediately after the unveiling more than 1,000 posters were purchased at $2.50 each by members of the organization, it was reported.

MATERIAL benefit to the lithographing industry will accrue, providing the glowing predictions made last month in Chicago at the 58th annual convention of the Outdoor Advertising Association of America come true.

Addressing the OAAA meeting, Walter Williams, Undersecretary of Commerce, Washington, D. C., estimated that by 1965 total advertising expenditures for all media will be about $12.4 billion, a boost of $4.2 billion or 50 percent above 1954. Outdoor advertising, he figured will do a bit better. Expenditures for this medium totaled nearly $187 million in 1954 or 2.28 percent of all advertising expenditures, he pointed out.

Referring to the recent forecast by the Joint Committee on The Economic Report, that national production will reach $540 billion by 1965, Mr. Williams asserted that advertising will play a big role in attainment of this goal.

Of special interest to lithographers in his detailed discussion of the advertising prospects was his stress on the growing emphasis alert manufacturers are placing on teen-agers and retired folks.

"If I were in the advertising industry," he said, "I would, during the next ten years, go after more business from the transportation and vacation industry, makers of sports goods, products of the expanding 'do-it-yourself' and hobby folks, toys and all the things that fashion-conscious and fad-following teen-agers want.

The growing cost of television and the trend toward use of this medium for impact rather than frequency was cited as an opportunity that could assist in expanding outdoor advertising.

"The big, weekly half-hour network shows on radio" said John W. Leach, vice president, Gardner Advertising Co., St. Louis, Mo., "used to give an advertiser pretty good frequency as well as prestige and impact. Today television is breaking many of the old frequency patterns of radio; and the wise advertiser, who may use television for impact, is looking for other media to supply the equally vital ingredient of frequency. Where else can he find it at as low a cost per impression as in outdoor advertising?"

Besides the 24-sheet poster, produced as part of the promotional program of OAAA, (pictured above), a new 30-sheet poster was discussed.

This new size increases posting area by 25 percent over the 24-sheet size and leaves a uniform white blank space of 4½ inches around the design. Already some 6 or 8 national advertisers are using the 30-sheet poster, it was stated.

To further encourage use of outdoor advertising, the Outdoor Advertising Institute, research and sales promotion arm of OAAA, has expanded its staff in 12 sales offices across the country, Ted W. Lord, eastern sales manager for the Institute, announced.

New president of Outdoor Advertising Association of America, elected at the Chicago convention, is Fred C. Beseler, president of B. & B. Systems, Inc., Shreveport, La. New vice president is Odell S. Hathaway, owner and manager of The Midport Co., Middletown, N. Y. For treasurer, Willard D. Billingsley, manager, the Baird Co., Little Rock, Ark., was selected. Continuing as general manager of the Association's Chicago headquarters office is Karl L. Ghaster, Jr., while D. W. Vanderwater continues as secretary. Harley B. Markham, Pocatello, Idaho, retiring president, was advanced to chairman of the board.

•

Offset Used in History Book

Deep Roots, a centennial history, has been published by the West Coast paper firm of Blake, Moffit & Towne. The 102-page book was printed on Strathmore Paper Co.'s Impress paper and 25 pages of illustrations were lithographed in two colors by Chas. R. Wood & Associates, San Francisco.

•

Retired ATF Mgr. Dies

Frank W. Shober, who retired recently after twenty years as manager of the New York district of American Type Founders, Inc., died Dec. 1 in Good Samaritan Hospital, West Palm Beach, Fla. He was 62.

Mr. Shober began his printing career in 1921 with the Tribune Printing and Publishing Co., Charleston, W. Va. and joined ATF shortly thereafter.

•

Five-Year Memberships for LNA

A membership certificate remaining in effect for a five-year period will be issued next year to replace the annual certificate which has been sent to members of Lithographers National Association in the past. Approved by the board of directors, a committee is working on the redesign and rewording of the certificate in time for distribution in April.

New York and Penn
Pressman with moisture indicator checks relative humidity "built-in" to New York and Penn offset paper to eliminate the "hanging" of sheets before they are run.
New York and Penn

WHY THIS OFFSET PAPER STAYS FLAT

Before any skid of paper is unwrapped, wise pressmen check its moisture content. But more and more lithographers are learning that a big orange New York and Penn label invariably means offset paper moisture-conditioned for their pressroom... and ready for the press. Seeing that label, they *know* that this is the paper that will *stay* free of waves or curl when the skid is opened under proper pressroom conditions.

It isn't just by accident that New York and Penn Offset maintains its just right-for-the-press quality. For one thing, this paper is manufactured so fibres align with consistently excellent formation. Curl and expansion are minimized right at the start. Then it is custom-conditioned to the humidity you request, cut in a big new "weather-controlled" finishing room, and packed in moisture-proof wrappers.

Finally, since New York and Penn mills are located right in the middle of the Nation's largest printing markets, this paper reaches you faster, with less handling. Result: higher quality, less work for you.

And are there other benefits to this offset? Yes! Color... opacity... bulk... economy... unusual ability to take folds, die-cuts and embossing—to mention a few.

You can get your nearest distributor's name by 'phoning MUrray Hill 6-6090. Or write New York & Pennsylvania Co., 230 Park Ave., New York 17, N. Y.

New York and Penn

Pulp and Paper Manufacturers

Super • English Finish • Eggshell • English Finish Litho • Offset • Music • Bond • Tablet • Duplicator • Mimeograph • Drawing • Imitation Press Board • and other specialty grades

. . . for crisp, sparkling halftones . . . you need

DINOLITH ORTHO

. . . the extreme contrast and high density orthochromatic film preferred by lithographers who pride themselves in the quality of their halftone or line negatives and positives.

alert lithographers depend on Dinolith Ortho for:

film versatility in both camera and contact work

sharp and uniformly dense halftone dots and line images

superior halftone etchings from camera-exposed negatives or positives made with fine or coarse glass or magenta screens

maximum halftone reductions without dot structure distortions

flat and non-curling prints possessing good dimensional stability

film processing and handling speed and ease

dinolith ortho is available in thicknesses of .005″ and .0035″.

PHOTOGRAPHIC DI-NOC PRODUCTS

you can get further information on this and other outstanding di-noc photographic products by writing . . .

DI-NOC CHEMICAL ARTS, INC.

PHOTOGRAPHIC DIVISION • 1700 LONDON ROAD • CLEVELAND 12, OHIO

branch offices: new york city, 295 madison avenue • chicago, illinois, 4522 west 16th street • utica, michigan, 45834 van dyke avenue los angeles, california, 4410 melrose avenue • *resident representatives: washington, d. c., tulsa, oklahoma and rochester, new york*

ATF Sales Managers

H. E. Stoddard *L. K. Pearson*

Harry E. Stoddard and Leo K. Pearson have been appointed regional managers of the Type Sales department, American Type Founders, Inc., it was announced Dec. 28. Under the direction of Jan van der Ploeg, Type Sales manager, they contact all authorized ATF type dealers in the U. S., train dealer salesmen, conduct sales meetings, and generally assist the dealers.

Mr. Stoddard joined ATF's New York sales organization in 1944. He was subsequently advanced to branch manager of the Des Moines, Iowa branch and later manager of the Minneapolis office.

Mr. Pearson joined ATF in 1955 to assist in establishing the Type Dealer program.

Mr. Stoddard will cover the eastern U. S., Mr. Pearson the western states.

•

Ryan Co. Appoints Sales Mgr.

Roland L. Swanson has been named sales manager in charge of the Davidson division of E. G. Ryan & Co., according to Clark Q. Snyder, vice president.

Mr. Swanson has charge of the line of offset and relief duplicating machines, folders, paper feeders, supplies and parts manufactured by the Davidson Corp. and distributed by E. G. Ryan & Co.

•

Quality of Litho Images Discussed

Research Progress No. 34, Lithographic Technical Foundation's periodic report, describes three projects including "Quality of Lithographic Images." Generalizations regarding graininess are that: 1) for a given type of grain, the finer the screen ruling, the stronger the impression of graininess; 2) when more than one type of grain is present, each type has its own individual influence on graininess which varies with the screen ruling; 3) graininess increases as the amount, size and contrast of the grains increase; 4) graininess increases as the integrated or overall density of an area increases; and 5) grain produces the same graininess appearance in line tints as it does in half-tone tints of the same screen ruling and density. The next article in the series will discuss the measurement of granularity. Two other topics considered in report no. 34 are: Copper Plating Zinc, Steel and Aluminum With Chemicals; and Removing Non-Blinding Lacquer.

•

Harris-Seybold Retired VP Dies

Wm. Guy Martin, a retired sales vice president for Harris-Seybold Co., died suddenly of a heart attack in California December 21, at the age of 68.

Mr. Martin had more than 40 years of service in the graphic arts industry at the time of his retirement in 1951. He was regarded as one of the pioneers who helped to establish offset lithography as a major factor in the commercial printing industry. His early experience in the graphic arts came from active participation in the Typothetae movement.

In the years just before and after World War I, Mr. Martin served as executive secretary or managing director of Ben Franklin clubs and other Typothetae locals in Seattle, Cleveland, Detroit, Cincinnati and St. Louis. In 1926 he left trade association work to join the Harris-Seybold sales department. He became a vice president in 1935, with headquarters in Chicago.

In 1946 Mr. Martin went to San Francisco for Harris-Seybold. Following a siege of heart illness he retired in 1951 as Pacific vice president.

•

Dunn Advanced at Ansco

Robert M. Dunn has been appointed acting general sales manager of Ansco, according to an announcement made Dec. 27 by Leopold Eckler, general manager. Mr. Dunn replaces William Balch who has resigned to become president and general manager of the David White Co., Milwaukee. Mr. Dunn, who has been with Ansco since 1931, has been the company's assistant general sales manager since 1948.

Letters

Editor
Modern Lithography

Dear Sir:

On the occasion of the Christmas season, I would like to send you my best wishes. To you and to all the people who make MODERN LITHOGRAPHY possible, my hearty greetings and admiration for the wonderful job you are doing.

I must say that since I started reading MODERN LITHOGRAPHY I have started to take a keener interest in my work and my progress has been quite noticeable.

The reading of your magazine is beneficial to all who are in the printing business; as for the technician, it's a must.

I hope to get more people interested in MODERN LITHOGRAPHY during the coming year, and thus increase the number of your readers in Egypt.

The four sample cards, delicately tinted, all were excellent examples of fine lithographic reproductions. Have any other readers in foreign countries produced greeting cards by offset?—Editor

These Christmas cards (enclosed) represent nineteenth century scenes of Egypt. They were done in 1848 by an English artist. We reproduced them from originals five times larger.

A Robertson 25/25 camera was used with a Kodak 150 line grey contact screen. The negatives were done on Ansco Reprolith Panchromatic film; the positives also were done on Ansco—Reprolith Ortho. I must admit that Ansco film is excellent for its contrast and density in half-tone as well as in line work.

The retouchings of the color-separation negatives were done by our staff artist, Tatul Sonentz. It is to be noted that the color distribution throughout the pictures has been handled liberally because of the faint coloring of the originals. Some colors have also been changed or added. Best Harris products were used for the preparation of the deep-etch plates, and the whole thing was printed on a Davidson press.

Aldo Fiorillo
Staff Process—Photographer
Cairo, Egypt

"CHAMPION" Deep Etch DOWN-DRAFT Lithographers Work Table

COMPLETELY ELIMINATES ALL HAZARDOUS FUMES

Check these advantages:

- Removes all hazardous fumes at their source—no odor in shop and offices.
- Table at convenient working height.
- Exhaust slot removes contaminated air through slot all around perimeter of working area at high velocity.
- Acid resistant KOROSEAL lined disposal pitches to a KOROSEAL lined 2" drain.
- Processing of plates on an everlasting smooth surfaced slate slab.
- Large heavy duty ball-bearing type built-in suction blower operates quietly and is belt driven by a standard speed motor.
- Reduces absenteeism.
- Tends to reduce insurance rates.
- Increases production.

4 POPULAR SIZES
(Other Sizes Upon Request)

No.	Slate Slab	Overall Dimensions (All 33½" High)	Exhaust Blower Capacity: Cu. Ft. Air Per Minute	Motor H. P.
1	30"x40"	42"x50"	2500	1
2	42"x50"	54"x62"	3200	1½
3	50"x60"	62"x72"	4200	1½
4	60"x80"	72"x92"	4800	2

SOME OF THE USERS OF "CHAMPION" EQUIPMENT

IN CHICAGO:
Jahn & Ollier Engraving Co.
Chicago Litho Plate Graining Co.
American Offset Co.
Collins, Miller & Hutchings
Superior Engraving Co.
R. R. Donnelley & Sons Co.
Central Type Setting Co.
Caspers Tin Plate Co.
American Can Co.

OUT-OF-TOWN USERS
Eastman Kodak Co.
Rochester, N. Y.
Gugler Litho Co.
Milwaukee, Wis.
Conner Lithographers
Detroit, Mich.
Hall Brothers
Kansas City, Mo.
Epsen Litho Co.
Omaha, Neb.
Atlanta Litho Co.
Atlanta, Ga.
Crane Howard Litho Co.
Cleveland, Ohio
Arrow Engraving Co.
Cleveland, Ohio
Marathon Corporation
Neenah, Wis.
A. L. Garber Co.
Ashland, Ohio
Litho Plate Service Co.
Toledo, Ohio
American Litho Co., Inc.
Atlanta, Ga.
Ideal Litho Service
San Antonio, Texas
Strobridge Litho Co.
Cincinnati, Ohio
Lithographic Plate Service
North Hollywood, Cal.

IN LOS ANGELES:
Mission Engraving Co.
Dillion Lithograph Co.
Colortone

DISTRIBUTORS

Bridgeport Engraver's Supply Co.
California Ink Co.
Harold M. Pitman Co.
E. T. Sullebarger Co.
Roberts & Porter, Inc.
IN CANADA
Toronto Type Founders Co., Ltd.
Latimer, Ltd., Toronto
Robert Allworth, Ltd., Toronto

"CHAMPION" Improved TEMPERATURE CONTROLLED Developing Sinks

MAINTAINS EVEN TEMPERATURE WITHIN A FRACTION OF A DEGREE

Features:

- Recirculating pump equalizes sink water temperature by forced flow of water around and under developing trays.
- Will maintain separate desired temperatures for sink trays (heating and cooling) and for storage compartment (cooling) to within a fraction of a degree of setting.
- Equipped with latest type hermetically sealed, trouble free refrigerating unit.
- In operation a continuous flow of water is not required. Result: no water wasted.
- Disposal trough for tray contents in back for convenience.
- High back splash, sink aprons, etc. constructed of polished stainless steel, heliarc welded.

#1	3 Trays	20x24 Film Size	32½" x 74"
#2	3 Trays	26x30 Film Size	39" x 93"
#3	3 Trays	30x40 Film Size	49" x 105"

. . . and other sizes available for your special requirements.

manufactured by **H. SCHMIDT & CO.**
ESTABLISHED 1891

317 S. Paulina St., Chicago 12, Ill. Tel. Haley 3-2504

Extron Roller Introduced

A new synthetic rubber printing roller, "Extron," is now in production at the Willow Grove, Pa. plant of The Moreland Corp.

The roller, a by-product of the search for a better tire for automobiles, will be distributed by six companies: Jomac Inc., New York and Philadelphia; Godfrey Roller Co., Philadel-

phia; Frank A. Reppenhagen, Buffalo; Harrigan Roller Co., Baltimore, Md.; National Roller Co., New York City; and Samuel Bingham's Son Manufacturing Co., with home office in Chicago.

Virtually transparent, the roller is a light amber in color. Qualities claimed for Extron are:

1) Three to four times the abrasion resistance of rollers currently being used; more resistance to cutting and other damage.

2) A smoother surface.

3) Superior tack.

4) Capacity to give better quality of printing.

5) Solvent resistance equivalent to the best Buna N compounds with the exception of alcohols and glycols (not a substitute for Thickol).

6) Non-meltable up to 300 degrees F., though not recommended for sustained services at temperatures above 150° F.

7) Freedom from shrinkage in service, since extractable liquids are minimized in its compounding.

8) Relatively flameproof and the combustion products are non-toxic when burned.

9) Superior recovery from deformation.

10) Three times the tensile strength of rubber.

"Letter Evaluator" Manual

Ideas to improve both sales and routine letters are contained in the "Mead Letter Evaluator" manual, being distributed by The Mead Corp. The methods of letter evaluation presented in the manual were developed by Earle A. Buckley, authority on letter writing.

The first section provides a method of analyzing and rating the effectiveness of a sales letter, *before mailing*. The second section contains an evaluator for every day, routine letters. Also provided is a score sheet for rating letters of your own, showing maximum point score for each of seventeen qualifications necessary to insure a well-written, effective letter.

•

Faribault With Pr. and Litho

Louis Faribault resigned from Price Bros. Litho Dec. 1 to become pressroom superintendent at Printing and Litho Service, Fairton, N. J. The company is adding 6,000 square feet of floor space and delivery was made this month of a new Lanston camera.

You'll never know how good it is unless you try it!

Send for the "Get Acquainted" TRIAL KIT

the "Watercote"
Color Proving Method
on Opaque White Vinyl
SAVES TIME
SAVES COSTLY PLATES

"Watercote" has speed and economy no other multicolor method can match.

Colors are printed and developed one upon the other without protection or lamination between colors.

NOT AN OVERLAY PROCESS.

All colors are positive prints on a white opaque sheet of plastic, from negatives, and registered by surprinting. All colors are clear and potent.

•

Check the Advantages of "Watercote"

- Detects errors before making costly plates.
- Prevents "Made-over" waste.
- Prevents misregister.
- Checks Tint Values.
- Prevents omissions.
- Checks size, fold and trim.
- Better than a Van Dyke.
- Serves as color proof for customer approval.

DIRECT
REPRODUCTION CORPORATION
811-813 UNION STREET, BROOKLYN 15, N.Y.

WATERCOTE TRIAL KIT
contains:
2 sheets of "Loftrite" #30 — 24"x30"x.010"
4 Eight ounce cans emulsion.
(Yellow, Red, Blue and Black)
Plus simple directions. Easy to follow.

ALL for $7.50

Send Coupon Now!

Direct Reproduction Corp. Dept. M
811-813 Union Street
Brooklyn 15, N. Y.

Gentlemen:
Please send me your Watercote trial kit. Enclosed find check for $7.50.

NAME _____

ADDRESS _____

CITY _____ ZONE _____

STATE _____

ORDERED BY _____

Equipment

SUPPLIES, BULLETINS

Robport Markets Tint Guide

ByChrome Screen Tints, giving a range of halftone tints that make possible multicolor effects with a single press run are now being offered to the graphic arts industry by Roberts & Porter, Inc., New York.

According to the company, lithographers will find it economical to cut the tints and make them an integral part of the lithographic flat. Six tints are available in the 133-line and 150-line screens.

•

New Step and Repeat Machine

Lanston Monotype Machine Co. has announced that the Magnastep, a new, low cost, Step and Repeat machine, will be ready for delivery early this year. Using a magnetic principle that permits precision registering of negative or positive transparencies for single or multi-color work, the machine saves time and steps, it is said. The arc lamp is controlled from the front control panel.

The vacuum frame, which holds the negative firmly to the plate, may be used as a conventional frame if desired. Adjustable light tight curtains protect the balance of the plate during exposure and do away with the need for layout sheets. The curtains are also adjusted from the front and then the frame is swung to vertical.

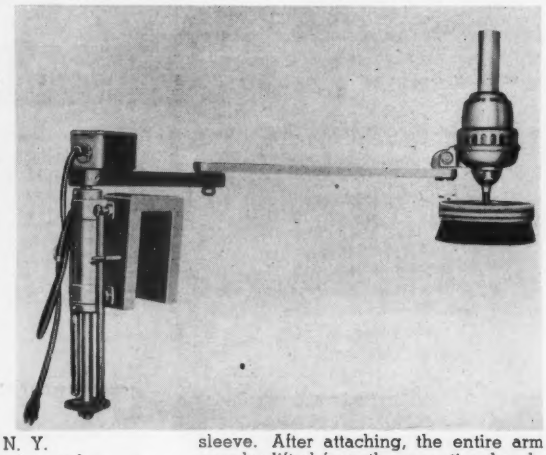
•

Sample Kits from Standard

Sample folders of six types of papers made by Standard Paper Manufacturing Co., Richmond Va., have been distributed by the company. Included are: Standard Vellum Opaque, Offset; Sulgrave Laid, Cover, Book, Plate.

Electric Reclaimer For Plates

"Handy Andy" plate reclaimer, operating from any 110 volt AC outlet and attached on the back, ends or front of the platemaker's sink, is said to eliminate much of the work of the hand scrub brush method, and gives even re-surfacing with no polished spots, according to Reproduction Research Laboratories, Inc., Oceanside, N. Y.



The machine is engineered to simulate the motion of the human arm and hand, and is guided and controlled by tension springs and ball bearing shaft sleeve. After attaching, the entire arm may be lifted from the mounting bracket when not in use. If desired the bracket itself may be removed with the thumb screws provided.

New Sans Serif from Linotype

A new American sans serif series, Trade Gothic, was announced recently by Jackson Burke, director of typographic development, Mergenthaler Linotype Co., Brooklyn, N. Y.

Trade Gothic
Specimen of Trade Gothic 1234
Trade Gothic Bold
Specimen of Trade Gothic 1234
Trade Gothic Condensed (No. 18)
Specimen of Trade Gothic 1234567890

The range of Trade Gothic will be 6- to 14-point including odd sizes. With extra condensed and condensed versions, each with bold, the Trade Gothics offer this face in a range of widths and weights from 6- to 36-pont. Light and bold weights are combined on the same matrix.

The new face may be described as the plainer American form of sans serif in contrast to the European and more stylized form as represented by Linotype Spartan, Mr. Jackson said.

•

Hamilton "Carousel" Paper

A four-page lithographed frenchfold folder has been issued by W. C. Hamilton & Sons, Miquon, Pa. on Hamilton Carousel Text, a white 80 lb. with the appearance of Italian handmade paper.

Council chamber, colonial capitol, Williamsburg, Va., and Brush-Everard House, Williamsburg, Va. are reproduced in four-color illustrations. The paper is available in cream, carnival red, holiday green, and royal blue as well as white.

Vertical Design in New Camera

Photocolor Model B-3 Projection Camera is a new piece of equipment designed for making pre-registered direct-screen color-separation negatives from color transparencies. Manufactured by Photostat Corp., Rochester, N. Y. and distributed exclusively by Polychrome Press, Inc., Princeton, N. J., this new model is an outgrowth and development of the Princeton Polychrome Press as used in their production of short-run color printing based on the Eastman Kodak Short-Run Color Printing System.

Some of the features include: centerless ground chrome plated steel column; interchangeable condensers; precision color transparency holder; turret lens holder; finger-touch raising and lowering of projector; controlled flash lamps; triomatic timer in main control panel; vacuum easel boards; constant voltage stabilizer; and vertical design.

•

Lacquer Lengthens Plate-Life

A new lacquer which extends press-run mileage for "3M" brand presensitized photo offset plates has been announced by Minnesota Mining and Manufacturing Co., St. Paul, Minn. Called "3M" brand long run lacquer, it puts a hard, thin film on the image, protecting the developing lacquer from wear and abrasion. The company reports that during field tests, press runs up to 50,000 impressions, the longest runs made, were frequent.

The lacquer is applied to the plate while it is on the press at any time before image break-down, usually after each skid change. Application takes about five minutes.

•

Aerosol Spray Cuts Skinning

Acrolite Products Inc., West Orange, N. J. has announced a new spray called "Ink-O-Saver" which is said to eliminate skinning of offset and letterpress inks.

The product, packaged in an aerosol container, is sprayed on ink surfaces at the fountain at closing time, on ink cans, on mixing tables and on forms and cuts.

Concurrent with introduction of the new product, Acrolite moved into new and larger quarters in West Orange, N. J. Four products previously introduced by Acrolite, also packaged in aerosol containers, are: Peppermint Plastic Spray, Artist's "500" Fixative, Glossy or Flat Black or White, Rich Gold or Aluminum, and Clear "100" Acrylic Spray.

•

Larger Lithowipers

A new Redifold Lithowiper is being introduced by Robert Busse & Co., New York, for use by lithographers. This new Redifold Lithowiper is 20 percent larger than standard, to permit its use one at a time instead of, as is common with smaller towels, to use them in pairs.

Bar-Plate Adds Space

Bar-Plate Mfg. Co., Orange, Conn., has added 6000 square feet to its plant to expand the manufacture of its line of offset equipment. Another 1000 square feet has been set aside in the office as a showroom.

The first two units that have been tested and now in production are the Bar-Plate deep etch down draft table and the utility inspection light.

The down draft table is made in four sizes: 31 x 39, 42 x 50, 52 x 64, 60 x 80. Inside of sink portion is permanently sealed with Koroseal.

The utility inspection light is manufactured in three sizes: 16 x 20, 20 x 24 and 25 x 26.

PLAN FOR PROFIT

with the BROWN LITHO PLATE WHIRLER

● The rugged construction for continuous service and all the latest achievements for precision whirling speed control makes the BROWN WHIRLER a trouble-free profitmaker for years and years. The convenient control panel, at the lower front of the whirler, contains an accurate reading tachometer which allows a steady reading of speed, a motor switch, a heater switch and a pilot light. Immediately alongside the control panel is the variable speed control. Speed of whirler can be varied between 35 and 100 rpm. by a simple turn of the control wheel. Write for FREE catalog of complete W. A. Brown photomechanical equipment.

SIZES:
21 x 25″
23 x 29″
27 x 31″
29 x 37″
31 x 41″
34 x 44″
38 x 49″
41 x 61″
43 x 55″
47 x 55″
51 x 67″
51 x 71″
53 x 77″
61 x 81″

• DEALERS IN ALL PRINCIPAL CITIES

W. A. BROWN
MANUFACTURING COMPANY
608 SOUTH DEARBORN STREET • CHICAGO 5, ILLINOIS

Advocate Printing Co., Newark, O. recently installed its first offset units, a Miehle 29 Offset and a Miehle 17 Lithoprint. Checking results on the new 29 are James Christien (l.), pressman; and Richard Weeks, Miehle Printing Press and Mfg. Co. (center photo) J. C. Dillon Co., New York City, have just installed this 52" Lawson series V-65 Hydraulic Clamp Spacer Cutter. Left to right are: William Bohrman, bindery superintendent; Al Marchini, operator; and Lester Reiss, E. P. Lawson Co., eastern salesmanager. (right photo) Gregory & Faulk, San Francisco, have installed a 59" Rutherford photo-composing machine. Gordon Falk and Vernon Gregory, partners in the lithographic platemakers company, watch Robert Chase, operator, set the machine.

New Equipment Installations

American Type Founders, Inc.

Guide Kalkhoff Burr, Inc., New York, N. Y.; ATF Mann Model L-236 Offset Press; Mahoney & Roese, Inc., New York, N. Y.; ATF Model L-159 Mann Offset Press; Vulcan Photo Engraving Co., New York, N. Y. ATF Chief "20" Offset Press; Offsetone, Press, Inc., New York, N. Y., ATF Chief "20" Offset Press. Scandinavian Airlines System, Inc., Jamaica, N. Y., ATF Chief "20" Offset Press; Standard Printing Co., Uniontown, Pa., ATF Chief "22" Offset Press; Times Litho Co., Inc., New York, N. Y., ATF Chief "29" Offset Press; Wales Strippit Corp., N. Tonawanda, N. Y., ATF Chief 20 Offset Press.

•

Harris-Seybold Co.

Translyvania Printing Co., Lexington, Ky., Harris 23 x 36" single-color offset press, Model LTN; Chris W. Georgehead, Louisville, Ky., Harris 36 x 48" two-color offset press, Model LUE; Neo-Lith Colorcraft, Inc., Baltimore, Md., Harris 23 x 36" two-color offset press, Model LTP; Milton Bradley Co., Springfield, Mass., Harris 43 x 59" single-color offset press, Model LTK; Dickinson Brothers, Grand Rapids, Mich., Harris 36 x 48" two-color offset press, Model LUE; Heinrich Envelope Co., Minneapolis, Harris high speed two-color envelope blanker, Model TRA; McGill-Warner-Farnham Co., Minneapolis, Harris 52½ x 77" four-color offset press, Model LTZ.

Missourian Printing & Stationery Co., Cape Girardeau, Mo., Harris 23 x 36" two-color offset press, Model LTP; Sosland Envelope Co., Kansas City, Mo., Harris high speed two-color envelope blanker, Model TRA; Printing & Lithographing Service Co., Fairton, N. J. Harris 23 x 36" two-color offset press, Model LTP; Barton Press, Newark, N. J., Harris 23 x 30" single-color offset press, Model LTW; Varsity Press, West Orange, N. J., Harris 17½ x 22 " single-color offset press, Model LTV.

Tri Cities Duplicating Service, Inc., Johnson City, N. Y., 17½ x 22", Harris single-color offset press, Model LTV; Dennison & Sons, Inc., Long Island City, N. Y., Harris 23 x 30" single-color offset press, Model LTW; Associated Litho Corp., New York, Harris 23 x 36" single-color offset press, Model LTN; Dart Press, New York, Harris 23 x 36" two-color offset press, Model LTP; Georgian Lithographers, Inc., New York, Harris 43 x 49" two-color offset press, Model LTL; Parish Press, Inc., New York, Harris 25 x 38" two-color offset press, Model LUB; Process Litho, New York, Harris 23 x 36" two-color offset press, Model LTP; Spot Carbon Products, New York, Seybold 34" Dynaclamp, full automatic clamp cutter, Model CHB; Cohber Press, Inc., Rochester, N. Y., Harris 23 x 36" two-color offset press, Model LTP; Nold-Miller Printing Co., Inc., Troy, N. Y., Harris 23 x 30" single-color offset press, Model LTW; Thomas A. Dexter Research Corp., West Nyack, N. Y., Harris 23 x 36" two-color offset press, Model LTP.

General Bookbinding Co., Cleveland, Seybold "Saber" 41" motor-driven back guage cutter, Model P-41; Studio of Printcraft, Champion, Ohio, Harris 17½ x 22½" single-color offset press, Model LTV; A. Steinhauser & Son, Cincinnati, Harris 17½ x 22½" single-color offset press, Model LTV; The Otterbein Press, Dayton, Ohio, Harris 36 x 48" two-color offset press, Model LUE; Majestic Press, Inc., Philadelphia, Harris 23 x 36" two-color offset press, Model LTP; Livermore & Knight Co., Providence, R. I., Harris 52½ x 77" four-color offset press, Model LTZ; Providence Lithograph Co., Harris 52½ x 77" four-color offset press, Model LTZ.

Texas Envelope Co., Dallas, Texas, Harris high speed two-color envelope blanker, Model TRA; Clark & Courts, Houston, Texas, Harris 23 x 36" two-color offset press, Model LTP; Federal Envelope Co., (Carpenter Paper), San Antonio, Texas, Harris high speed two-color envelope blanker. Model TRA; Morton Mfg. Corp., Lynchburg, Va., Seybold 34" Dynaclamp, full automatic clamp cutter, Model CHB; Milprint, Inc., Milwaukee, Harris 52½ x 77" four-color offset press, Model LTZ.

Coast Paper, Ltd., Vancouver, British Columbia, Seybold 34" Dynaclamp, full automatic clamp cutter, Model CHB; The Runge Press, Ltd., Ottawa, Onario, Seybold 34" Dynaclamp, full automatic clamp cutter, Model CHB; Gazette Printing Co., Ltd., Montreal, Province of Quebec, Harris 36 x 8" two-color offset press, Model LUE.

•

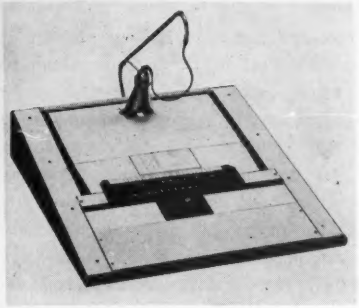
E. P. Lawson Co.

Piedmont Label Co., Inc., Bedford, Va., 52" V-65 Cutter; J. C. Dillon Co., New York, 52" Electric Spacer; Mahwah Color Co., Inc., Mahwah, N. J., 52" Electric Spacer; Precision Rubber Products Corp., Dayton, O., 46" Electronic Spacer; Clearpoint Paper Co., Emeryville, Calif., 52" Electronic Spacer; The Todd Co., Wm. Mann Division, Philadelphia, 46" V-65 Cutter; F. A. Woerner Co., Reading, Pa., 46" V-65 Cutter; Kleen-Stik Products, Inc., Chicago, Ill., 52" Electronic Spacer.

A. R. Fleming Printing Co., St. Louis, Mo., 52" Electronic Spacer; General Electric Co., Salem, Virginia, 52" V-65 Cutter; Kutterer-Jansen Printing Co., St. Louis, Mo., 46" V-65 Cutter; Case, Lockwood & Brainard, Hartford 1, Conn., 46" V-65 Cutter; DeLuxe Check Printers, Chicago, Ill., 46" Electronic Spacer; Keuffel & Esser, Chatham, N. J., 52" V-65 Cutter; Rich Lithographing Co., Chicopee Falls, Mass., 52" Electronic Spacer; Christian Board of Publication; St. Louis, Mo., 52" Electronic Spacer; Sears, Roebuck & Co., Chicago, 46" V-65 Cutter; Shelton Color Corp., Hackensack, N. J., 46" V-65 Cutter; Drury Printing Co., Dayton, O., 52" Electronic Spacer; National Carbon Paper Co., Sturgis, Mich., 46" V-65 Cutter; LaClede Mfg. Co., Buffalo, 46" V-65 Cutter.

Mergenthaler Has ProType

ProType, a new machine for setting display and headline type photographically, is being distributed exclusively, by the Mergenthaler Linotype Co. and its subsidiary, Davidson Corp., Brooklyn, N. Y. ProType combines a wide



variety of faces and sizes — 10,000 available currently — with low cost and quick, simple operation, J. W. Reid, vice president of Mergenthaler announced.

In all faces the range is from 18- to 90-point, and in some faces the range is from 6- to 90-point.

The machine is 23½ inches square and 20 pounds in weight.

ProType uses special sensitized paper and film which are not affected by normal incandescent illumination and complete fonts of type or lettering are on negatives, the operator exposing one character at a time. The machine will take any size of paper from a small strip to a 17" by 12" sheet.

•

Kodak Auto-Positive Materials

The nature, operation, and use of Kodak Autopositive Materials are described in detail in a new pamphlet issued by the Eastman Kodak Company. The booklet, "How to Use Kodak Autopositive Materials," gives specific recommendations for handling Kodak Autopositive Film (Thin Base). Included in the pamphlet are instructions for making a laterally reversed duplicate negative (or positive), making uniform halftone tints, and making negatives and positives of a single subject on the same piece of film. Other unusual applications such as outline effects, intermediates for making positive blue keys, and the reflex copying of reflection prints are included.

Copies of the booklet may be had without charge by writing the Graphic Reproduction Sales Division, Eastman Kodak Co., Rochester 4, N.Y.

•

New Knife From X-Acto

An inexpensive new knife, designed for the graphic arts has been introduced by X-Acto, Inc., Long Island City, N. Y.

The "No. 4" knife has an over-all length of 5", a ¼" diameter cylindrical all-metal handle and a ⅛" width high carbon steel angled cutting blade. A collar opens and closes the chuck.

Darkroom Chemicals Booklet

A new 10-page booklet on prepared photographic chemicals is now available from Ansco, Binghamton, N. Y. The booklet, "Ansco Prepared Chemicals" is a ready reference to the company's line of prepared developers, fixers, toners, reducers and other special aids in darkroom work. A special page at the end of the booklet offers a list of helpful dark room tips.

Major characteristics of the various formulas in ready-mix form are described.

Why not with the New Year, resolve to explore the latest method of setting type . . . photographically?

Almost daily, letters arrive at Warwick from new users of this phenomenal typesetting method, letters sprinkled with such expressions as "I've never seen type proofs so sharp!". . ."I examined my proofs under a strong magnifying glass and the sharpness of the type characters is astounding!" etc.

These exclamations in many cases come from veteran type buyers who are now completely sold on Warwick Fotosetter* composition.

Why not send a trial order and let us convince you that this is truly a remarkable advancement in typesetting methods? Write for our type specimen book "Warwick Photographic Typesetting," it's free!

*Trade Mark Reg. Intertype Corp.

WARWICK TYPOGRAPHERS, INC.

Dept. G-6 • 920 Washington Avenue • St. Louis 1, Mo.

Warwick Serves Clients
in 40 States, Canada,
Mexico and Cuba.

Hammermill Cartons Bear Signal

Paper with new and improved carton and ream labels is now being delivered by Hammermill Paper Co., Erie, Pa.

An improvement which applies to the carton labels provides a color identification signal. This is carried out with a colored square at the right-hand end of the label which indicates the color of the paper within the carton and is also prominently overprinted with the name of the particular color.

In addition to the color signal the labels are printed with "upside down information," so that the size, substance weight and contents of the carton can be conveniently read if the carton is right side up or upside down.

•

Miehle Folder Shows Duotone

Most recent in the sales and technical literature from Miehle Printing Press & Mfg. Co. is a six-page lithographed folder "Plan for More Offset Profits." Illustrated is a bowling ball hitting ten pins, done in duotone; yellow is the second color.

The
GEORGE HANTSCHO CO., INC.
designs and builds
ROLL FED
LITHO PRESSES
Also letterpress, rubber plate presses, etc.
These presses can be equipped with folders, sheeters and rewinders to suit every purpose. Sizes: 17"x26" to 35"x50" single and multiple units for black & white and color work.
Your inquiry is invited.
George Hantscho president
E. G. Ryan vice president
FROM BLUEPRINT TO PRESS
OUR NEW PLANT WITH GREATLY EXPANDED FACILITIES
GEORGE HANTSCHO COMPANY, INC.
Formerly Graphic Arts Machinery, Inc.
Office and Plant
602 South 3rd Ave.
Mt. Vernon, N.Y.
MO 7-8200, MO 4-9080
Midwest Office
153 West Huron St.
Chicago 10, Ill.
DE 7-3313

Pump, Air Filters Bulletin

The Dexter Folder Co., Pearl River, N. Y., has issued a new bulletin covering the Dexter-Conde "Dri-Air" pump and Dexter-Conde air filters. The pump is especially designed for applications having low cfm requirements at pressure from 20" Hg to 10 psi.

Included in the bulletin are illustrations showing rotary pump and air filter construction, and a specification table giving speed, capacity, maximum vacuum, and continuous maximum pressure for three pump models. Data is given for 12 operating conditions ranging from 3.5 to 33.2 cfm.

In the air filter section, specification information and descriptive data are given on: (1) the "open-end" model for air intake at the filter, and (2) the "in-line" model for installation in vacuum lines between the intake point and the pump.

•

Mailer on Wash-Up Solvents

DBA Products Co., Deerfield, Ill. has issued a four-page folder on its "Kwik-Kleen" wash-up solvents, listing three types of cleansers. Kwik-Kleen Roller Wash can be used in place of lye and steel wool operation in removing a hard film of varnish left by ink or ink vehicles on synthetic rollers, it is said.

•

Color Talks Says Mead

In "Better Impressions" No. 2, Mead Corp. concludes in an article on "Color Talks," that:

"It appears that color, to the majority of people, is not so much a matter of thought as of mood. Colors that reflect and reinforce current moods are immediately attractive. Color can be used as an exciting influence in creating specific moods in the planning of printed material."

Citing the case of a druggist who chose deep yellow for a mailer to promote his cosmetic department, the article continues that this mailer failed because the particular shade spells just the opposite of feminine beauty.

Better Impressions contains 20 pages demonstrating a few of the papers sold by Mead. The booklet is printed by offset and letterpress.

Driers Reach High Heat Fast

The J. E. Doyle Co., Cleveland have developed an infrared drier incorporating a new General Electric quartz tube heating element. These units come up to heat instantly when the electricity is turned on, it is said. The driers are suited for sheet or web fed printing presses for rapidly drying ink, and for treating and conditioning coatings on paper, fibre and textiles. They may also be installed over conveyors or as an integral part of other processing equipment.

In addition to reaching maximum heat instantly, the quartz enclosed elements cool off quickly, reducing fire hazard (paper may fall against the element).

An installation of the new Doyle Infrared Driers has been completed in the U. S. Treasury department for drying paper money.

•

Color Promoted in Mailer

Graphic Laboratories, Nashville, Tenn., has produced a four-color mailing piece to interest customers in greater use of color in their advertising. Subjects illustrated include baseballs, bananas, boxes and buttons. The job was run from PDI copper and aluminum grainless plates on a 17 x 22 Harris press.

•

King to Conduct Typo Workshop

The second Typographic Workshop, co-sponsored by Intertype Corp. and Southern Illinois University will be held Feb. 18 at Carbondale, Ill. More than 200 are expected to attend the all day meeting, conducted by Howard N. King, consultant.

The first Workshop was held Nov. 19 at Kent State University, Kent, O. with 125 attending.

•

R & S Boosts Offset

Terry Shuman, vice president, Recording & Statistical Corp., Boston, reviewed the expansion of the offset division last year and announced the firm's intention to emphasize offset in the coming year, at the holiday party of R & S last month. The division now has 14 men and a new building of its own.

The company held its annual Christmast Party Dec. 16 at which awards were made to Quarter Century Club members. About 350 attended.

•

3-M Names Eastern Sales Mgr.

Advancement of Leo L. Norwich to eastern sales manager of the printing products division has been announced by Minnesota Mining & Manufacturing Co., St. Paul, Minn. For the past two years he was sales manager of distributor trades for the printing products division.

Nekoosa News Done Offset

More than 6500 people in the Nekoosa-Edwards Paper Co. organization got an informative and well illustrated lesson in offset lithography when they read a recent issue of the company house organ, *Nekoosa News*. Eight pages were devoted to a detailed description of how the *News* itself is produced, from the first idea for a story through the layout, copy preparation and plate-making stages to the pressroom, bindery and mail room.

GETS MORE WORK DONE because it's BETTER!
✓Better for your Blankets!
✓Better for your Rollers!
✓Better for your Health!
✓Better for Reducing your Fire Hazard!
Anchor's
Fast RONOLENE Safe
NON-TOXIC NON-EXPLOSIVE
LITHO BLANKET and ROLLER WASH
RONOLENE
gets more work done because...
• Its power-packed action removes all the ink faster.
• Dries just right. Leaves rubber clean and velvety.
• Checks glaze and conditions the rubber.
• Easy to use by hand or press wash-up attachment.
• Free of harmful materials. NO carbon tet., no wood alcohol, no toxic coal tar solvents as Benzene etc.
Packed in one and five gallon cans and 55 gal. drums
Order Today. Write Dept. RM
Send for FREE literature on "How to care for rollers and blankets"
ANCHOR CHEMICAL CO., INC.
"SOLUTIONS FOR GRAPHIC ARTS PROBLEMS"
829 BERGEN ST., BROOKLYN 38, N.Y. MAin 2-8006

You can't wiggle your way out of it —

Crescent makes the best.

Look to Crescent for ink leadership!

Crescent
INK & COLOR COMPANY
464 N. 5th St., Philadelphia 23, Pa.
3901 W. Rohr Ave., Milwaukee, Wis.
244 Forsyth St., S.W., Atlanta, Ga.
INKS FOR LETTERPRESS • LITHOGRAPHY • FLEXOGRAPHY • ROTOGRAVURE

New Gages for Litho Grain, Paper

Sheffield Corp., Dayton, O., has introduced three new gages for use by the graphic arts industry: the Lithotest, the Porosimeter, and the Paper Smoothness gage.

The "Lithotest" measures the uniformity and depth of the grained surface of lithographic plates. It has been evaluated by the Lithographic Technical Foundation and by several large lithographers and plate grainers and it covers the complete range from very fine to very coarse surfaces, it is said. The Lithotest gage head through which air flows, is placed on the plate and the rate at which the air leaks across the grained surface is amplified and indicated by the position of the float in the Precisionaire (air flow measuring instrument). The finer the grain, the less will be the air flow, and the lower the float position.

The Porosimeter is designed to inspect paper ranging from non-porous to rather porous filter paper. Readings are instantaneous, with range and accuracy beyond that specified in TAPPI Standard No. 460-M49, it is said. An 11" x 11" paper sample can be explored in less than 60 seconds.

The smoothness gage consists of a device having a smooth glass plate on which the paper is placed, a moveable gage head through which air is directed, and a Precisionaire air flow measuring instrument. Air at a pressure of 1½ psi flows through the Precisionaire and then through an orifice in the gage head and fills the groove between two annular lands. The air then escapes or leaks across the surface of the paper under the lands, causing the float to rise in the Precisionaire. The height of the float in the glass column indicates the rate of air escapement.

•

Offset Plates Q & A Book

"20 Questions Answered by 20 Lithographers" contains reports from the field on the performance of "3M" brand lithographic plates and is being offered by Minnesota Mining and Manufacturing Co., St. Paul, Minn.

It contains 20 questions frequently asked concerning performance of the company's lithographic plates, and the answers given by lithographers.

To Make Rollers in Calif.

Offset Rubber Products has been formed in El Monte, Calif. to manufacture offset rollers, fountain bottles, and ejector wheel streak eliminators, it was reported last month. According to the Company, the all-new line of rollers incorporates advanced features including special-formula rubber compounds for both ink and water distributing units, greater use of ball bearings and other improvements. The company also manufactures a non-breakable plastic fountain bottle with a one-piece, self stopping aluminum cap and a wheel streak eliminator for the Series 1200 Multilith offset duplicator.

•

Canco Predicts Higher 1956

The can industry has attained new production levels in each of the last four years and the trend is almost certain to continue through 1956 and in the years beyond, it was stated recently by William C. Stolk, president of American Can Co. Mr. Stolk estimated 1955 can production at about 38 billion units, compared with 36.2 billion the year before. Output in 1956 should range between 39 and 40 billion units, and within the next four or five years should be well over the 40 billion can mark, he said. Mr. Stolk continued that one reason for optimism is the good general outlook for the nation's economy in 1956.

"The outlook for fruit and vegetable can production is good for 1956, but as always will be at the mercy of weather conditions in the key growing areas. Packs in some areas during 1955 were smaller than expected because of bad weather. As a result, canned fruit and vegetable carryovers will not be excessive and 1956 packs should be as large or larger than in 1955."

Fruit and vegetable cans are still the can industry's largest single production item, accounting for about 32 per cent of its annual output. Beer cans represent 16 per cent of the total.

"A number of recently developed new containers made substantial gains in 1955 and promise great hope for the future. Among them are cans for liquid shortening, liquid detergents and soft drinks, pressure cans for various types of products and the company's new quart can for beer. The potential for detergent cans is substantial and will be even greater when producers start using cans for the packing of heavy-duty detergents," he said.

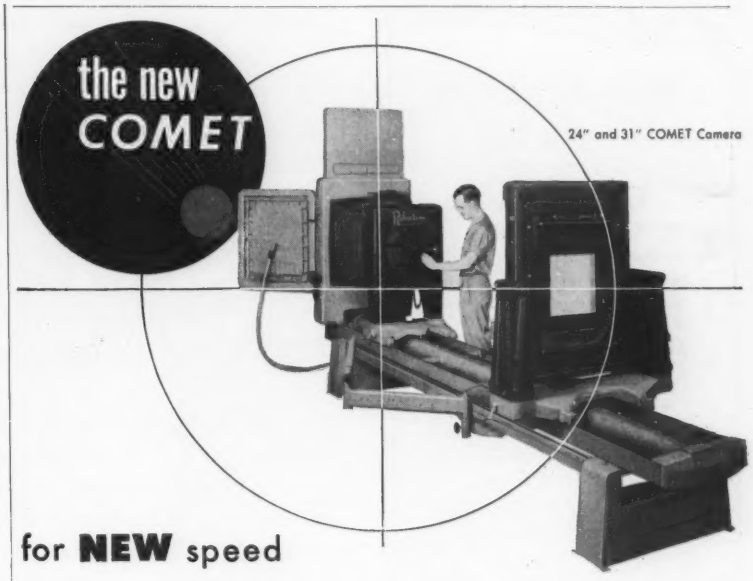
•

Doerfler Dies in Milwaukee

John Doerfler, poster artist and former president of local 7, Almagamated Lithographers of America, died Nov. 28 in Milwaukee. He was 74.

NY Graphic Arts Party

Litho Club of New York, Club of Printing House Craftsmen, Young Lithographers Association and Printers Supply Salesmens Guild joined in staging the 4th graphic arts Christmas party at The Commodore Hotel, Dec. 9. Attendance totalled more than 1200, 50 door prizes were given away and entertainment featured Peter Donald as emcee, the Janette Hackett Dancers, Helene & Howard and other variety acts.



for **NEW** speed

NEW ruggedness

NEW economy

Easier, Faster, More Accurate Camera Operation

Now you can meet competition with modern equipment, built to rugged standards at a price you can afford to pay. Here is your chance to re-equip your camera department with a completely new, all metal camera, capable of growing with you as your business expands, regardless of its scope.

The new Robertson **COMET** features the latest camera advancements including new concepts in design and construction that result in smoother, faster and more accurate camera operation. The **COMET** is available in both 24" and 31" sizes in a variety of models ranging from black and white units to fully equipped process color cameras.

FREE Send now for your copy of the new Robertson catalog, including specific information on this camera

Robertson PHOTO-MECHANIX

A complete line of photomechanical equipment

ROBERTSON PHOTO-MECHANIX, INC.

7436 LAWRENCE AVENUE • CHICAGO 31, ILLINOIS

Save HALF Your Saddle Stitching Costs!

This is no trick at all when you use the Rosback Auto-Stitcher. Want proof?

Rosback®

Auto-Stitcher Features

- Basic machine has two stitching heads and slide stacker delivery.
- Seven accessory attachments, including continuous belt delivery, are available to meet the requirements of printing plant or bindery of any size.
- Low in price—less than half that of any gang stitcher.
- Cuts costs—as much as 50% or more when compared to hand stitching.
- Handles short runs at low cost—saves tying up expensive gang stitcher equipment.

One experienced user reports:

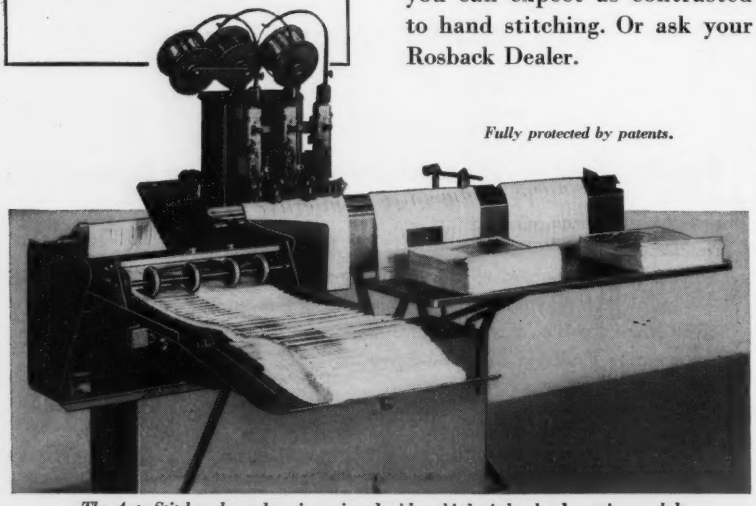
"Using our Auto-Stitcher two girls now do in eight hours what formerly took five operators working eleven hours. That's a clear saving of 70% in direct labor alone!"

Can you think of any easier way to cut costs and earn *extra* profits in *your own* business?

It costs you nothing to find out about the Auto-Stitcher and how it makes possible such valuable savings. And there's no obligation.

Send us samples of your average stitching jobs. We'll gladly give you complete description of the Auto-Stitcher and a careful, conservative estimate of the savings you can expect as contrasted to hand stitching. Or ask your Rosback Dealer.

Fully protected by patents.



The Auto-Stitcher shown here is equipped with a third stitcher head, continuous belt delivery and second feeding station.

F. P. ROSBACK COMPANY • Benton Harbor, Mich.

WORLD'S LARGEST MANUFACTURERS OF PERFORATORS, WIRE STITCHERS AND PAPER PUNCHING MACHINES

Lanston Gives Printer's Calendar

Lanston Monotype Machine Co., Philadelphia, has taken two important occasions, Christmas, 1955, and the 250th anniversary celebration of the birth of Benjamin Franklin this month, to issue a "Franklin" calendar. Wood engravings are used to illustrate the booklet which contains highlights from the life of Franklin, set in the various type faces popular today.

•

Screen Process-Litho Film

"Screen Process, the Magic Medium" is the title of a half-hour motion picture produced by John Seigle, former screen process printer, and sponsored by the Northern and Southern California chapters of the Screen Process Printing Association International. Featured in the film are multiple uses of screen process printing, alone and in combination with lithography and letterpress printing.

•

Lithographers Incorporate

Morrimac Press, Inc., printers & lithographers, New York City, has been granted charter of incorporation listing capital stock of 200 shares, no par value. Directors: Milton Berger, Jack Feller and Morris Kaufman.

Litin Lino Service, Inc., printing-typesetting, New York City, has been granted charter of incorporation listing capital stock of 230 shares pfd. stock $100 par value and 30 shares common stock no par value. Directors: Sol S. Zuckerman, Arthur Pick and A. Robert Goldman.

•

Spaulding-Moss Has Party

More than 200 employees of Spaulding-Moss Co., Boston, were entertained at the annual Christmas Party, Dorchester Plaza, Dec. 20. Engraved watches were presented by Philip B. Terry, general manager, to the following employees entering the Quarter Century group: Melbourne R. Jones, Vincent R. D'Agostino, Mabelle S. Dean, Vincent F. Traniello, and Charles A. Sullivan. Special recognition was given to Charles H. Foster, Sr. for his 35 years service.

Levey Reviews Bi-metal Plates

The Fred'k H. Levey Company, Inc., New York, has been manufacturing bi-metal lithographic plates based on the Aller patent since 1948 as part of a long range development program and the company has reviewed its investigations in the field in a recent announcement.

Levey developed and commercially advanced a tri-metal plate with stainless steel as the base in 1953. Copper and then chromium were electrolytically deposited to form this tri-metal plate.

It was found possible to make a combination of stainless steel, copper and chromium tri-metal plate; in which case, the chromium formed a water receptive surface as is normal with tri-metal plates. Also, after the plate was used, the chromium could be removed and its plate subsequently converted to a bi-metal plate in the manner for plates of stainless steel and copper (aller). Plates were thus converted from tri-metal to bi-metal plates and used commercially.

COST AND PRICING

(*Continued from Page* 82)

for selling cost (without commissions), 11 percent of the conversion cost is used as a charge for the proper amount for administrative cost, 10 percent (or 11 percent) of the conversion cost is designated as the proper profit this job should be charged with.

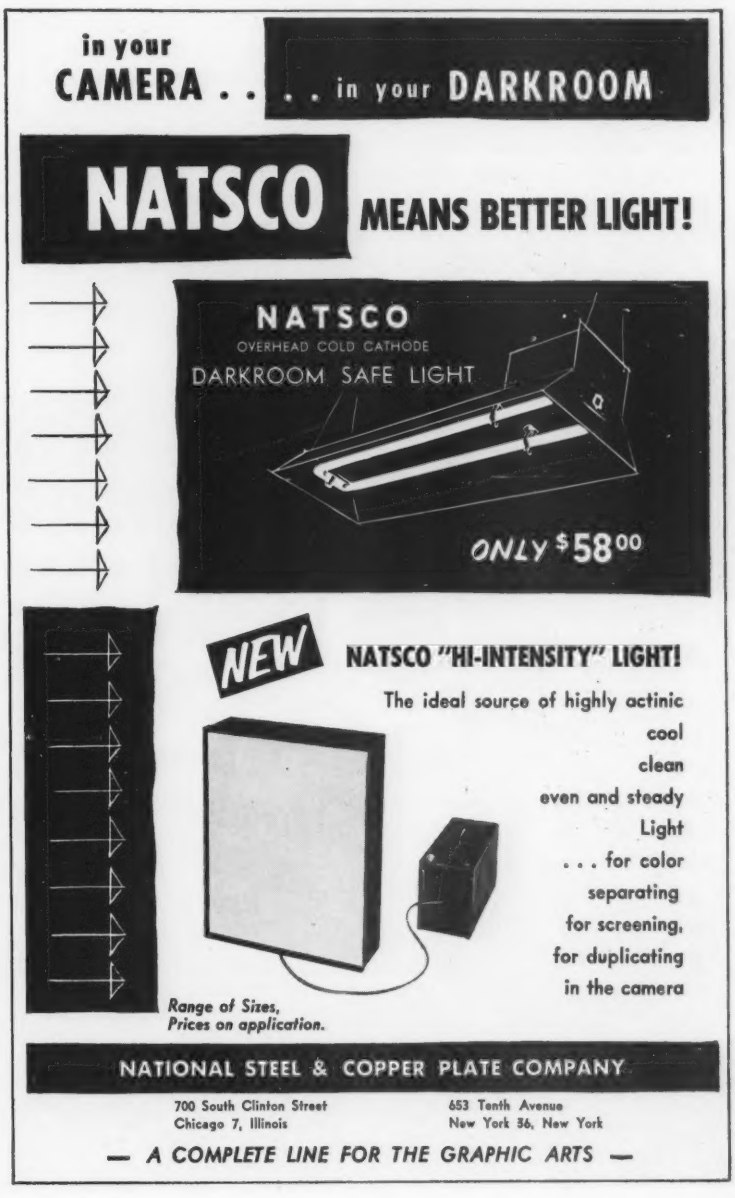
This procedure establishes a *standard price*. This standard price includes selling costs without commissions. If you pay salesmen a salary and commission or straight commission, the salary would be included in the selling costs, but the commission, (and cash discount) must be added to the standard price. If the standard price developed was $282.00 and a 5 percent commission was to be paid and 1 percent cash discount allowed, a total of 6 percent additional cost would have to be paid on the selling price.

Profit should be distributed against the machine rate. No profit is added to materials. The reason this is recommended is that if you price on factory cost, on jobs with more expensive materials, you can price yourself out of the market, and on jobs with high machine rate and low materials cost, you will underprice. Basically you are selling conversion, not materials.

Your company sells labor—conversion. Your customer can if he desires buy materials just as well as you can. But he cannot buy your "know how" using your facilities.

I would like to make one comment on selling. There are today too many companies forgetting that salesmanship is not just meeting a price. There are such things as quality, assistance in art work, design, the facilities of your laboratory, or the specialized experience of your personnel is available to the customer, promptness of delivery. If you sell only on price, why not save money by firing your salesmen and use postal cards? Postal cards can sell on price as well as any salesman.

Any company with a good cost system is like a man with a good strong heart. Such a company, and such a man, will go a long way with success.★



HISTORY OF DAMPENING

(*Continued from Page 65*)

design, from space and operational standpoint.

7. Must not be difficult to set in operation, and adjust during run.
8. Must not present mechanical, health or electrical hazards to press operator.
9. Must not cause moisture to form or collect on areas other than the printing plate, especially in the cylinder gap.
10. Must be operable at any speed at which press is run.

Desirable Characteristics:

1. Should have infinite adjustment of dampening fluid supply, from zero to excess amount, and settings should be simple, visual and easy to repeat.
2. For an aqueous dampening fluid, the device may, preferably, not require roller contact.
3. Should be self-contained on the press.
4. Should be an improvement over present molleton systems in features listed under "Required Characteristics" in this paper.
5. Preferably should not be a complex mechanical or electrical system.
6. Should operate for extended periods without cleaning or changing compounds of the system.
7. Should be quiet in operation.
8. Should not employ materials critical in wartime or peace.
9. Should dampen the non-image areas only.
10. Should have complete automatic operation regulated by need, consistent with No. 5 immediately preceding; this implies rapid response to changed settings or changing demand for fluid.

If a system meets most of these characteristics it certainly should serve well on a modern lithographic press until a truly dry lithographic surface plate and process become available.★

BUDGETING COSTS

(*Continued from Page 60*)

over any given rate of productivity. Productivity for a camera department where a plant enjoys long runs is usually low. If the runs are to be short runs, obviously much more camera work will be required and productivity will be high. The only way to determine actual productive time in a department or on a job is to install a cost system and then record both productive and non-productive time, job by job, day by day, over a period of time and thereby build up productive standards for the specific departments in your plant.

In this study we have budgeted manufacturing costs and all-inclusive costs over 60 percent, 75 percent and 85 percent of productivity. The productive hours are based upon the data as computed in Chart F. The benefit of setting up the information in this manner is evident. Chart C is a schedule showing the rates we have worked

Did You Artarize Your Gallery? Are You Ready For Color?

These TOP Camera Manufacturers Recommend and Use...

GOERZ
RED DOT
ARTAR
LENSES

THE LENS FOR THE GRAPHIC ARTS

You are better prepared for color if you have the New GOERZ RED DOT ARTAR Lens in front of your camera.

Remember it's *the lens* that "sees" the color copy.

Ask your Graphic Arts representative about the "Red Dot." Keep up with your competitors.

C. P. GOERZ AMERICAN OPTICAL COMPANY

Office and Factory: DOUGHTY BLVD., INWOOD 96, L. I., N. Y.

GOERZ

out for our specific plant.

It is not difficult to budget departmental costs in a specific plant. A good bookkeeper can do it. No company can afford to operate in the days ahead without knowing what it costs to operate the equipment in its plant.★

PRINTING WEEK

(*Continued from Page 52*)

Greenberg, chairman emeritus, The Steward Co.; Charles Stubbs, banquet chairman, Economy Lithograph Co.; Sue Carroll, Financial chairman, Charles R. Hadley Co.; Lew Wilkins, promotion chairman, Bryan & Brandenberg; Charles Aydellotte, newspaper promotion, Rogers & McDonald newspapers; Richard Hoffman, schools and colleges, Los Angeles City College; Charles Wortman, plants and progress; Miehle Co.; Herbert L. Mitchell, library and window display, *Graphic Arts Monthly;* Ewart Johnston, radio-TV, Los Angeles Trade Technical College; Roby Wentz, service clubs, *Western Printer and Lithographer;* Perry Long, Speakers Bureau, Bryan Brandenburg; Henry Henneberg, general secretary and consultant; Peter Fry, as president of PIA; Gordon R. Holmquist, as president of Printing Week Council; William Silverman, as president of the Craftsmen's Club; Reaugh Fishers, as Benjamin Franklin himself.

EUREKA

(*Continued from Page 39*)

sheets to twist and curl, so the tension is removed in a breaker machine. The web of paper is bent over straight edges. This bending of the paper breaks the surface of the gum and takes away the tendency to curl.

Protect Customers

Coupons, certificates and trading stamps have a monetary value. They are in fact miniature checks. Consequently, it is desirable to help protect the company or agency which distributes them against counterfeiters and other unscrupulous duplication. Adequate protection is provided by check paper. This check paper is supplied by a number of manufacturers in a variety of designs that have found favor with lithographers. For Eureka's unique problems, however, the company found it advantageous to make its own safety stock, with a pattern of its company initials ESPCO. Today, Eureka also converts safety paper for its large clients with their trademarks or logotypes.

Safety paper begins with a roll of suitable quality paper from the paper mills. It is tinted and marked with standard tints such as pink, blue, light green, brown, etc., that are satisfactory for overprinting stamp or coupon designs. Paper stock arrives in the Eureka receiving department in continuous rolls. Rolls for smaller presses are split to size by a rotating knife and rewound. For presses which print from individual sheets, a roller knife on a sheeting machine slices off the

the RIGHT MOVE!

whenever you need Service or Supplies

Success in most things depends a lot on making the right move — that's why so many successful companies in the graphic arts are moving to Besco. They know that Besco is a reliable source for supplies and equipment. They know that Besco service is prompt, cheerful and accurate. They know that "BESCO means the Best".

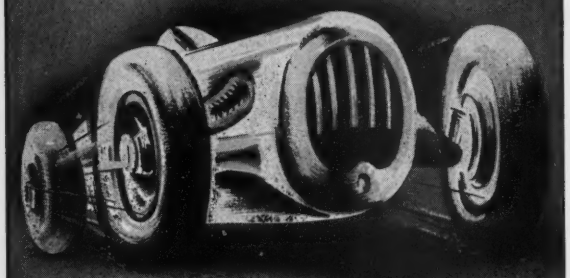
BRIDGEPORT ENGRAVERS SUPPLY CO.
BRIDGEPORT 2, CONNECTICUT
BOSTON: 287 Atlantic Avenue • CLEVELAND: 1051 Power Avenue
NEW YORK: 525 W. 33 Street • CHICAGO: 900 N. Franklin Street

HANCO

SPEEDOL

PRESS CLEANING SOLUTION

FAST... FAST... FAST...



COMPLETELY DISSOLVES IMPREGNATED INKS

"Speedol" quickly removes even deeply impregnated dirty ink film from press rollers, dried ink and residue that other wash-up solutions fail to remove. Thoroughly cleans and reconditions rollers and gives them new life.

Go from Black to Yellow in ONE washup!

Simply wash off ink with regular solvent, then apply "Speedol" to remove blacks, blues, dried gum, etc. Only ONE special cleaning solution required . . . "SPEEDOL". In semi-liquid paste form, "Speedol" contains NO ACIDS, ALKALI or other irritating solvents. PRICED LOW!

MONEY-BACK TRIAL ORDER ML 156

A. E. HANDSCHY CO.,
125 S. Racine Ave., Chicago 7, Ill.
Send us the quantity of "Speedol" ordered below on your "satisfaction or money-back guarantee" trial offer.

1 Gallon Can $3.25
1 x 5 Gal. Can. Gallon 2.75
1 x 50 Gal. Drum. Gallon 2.50

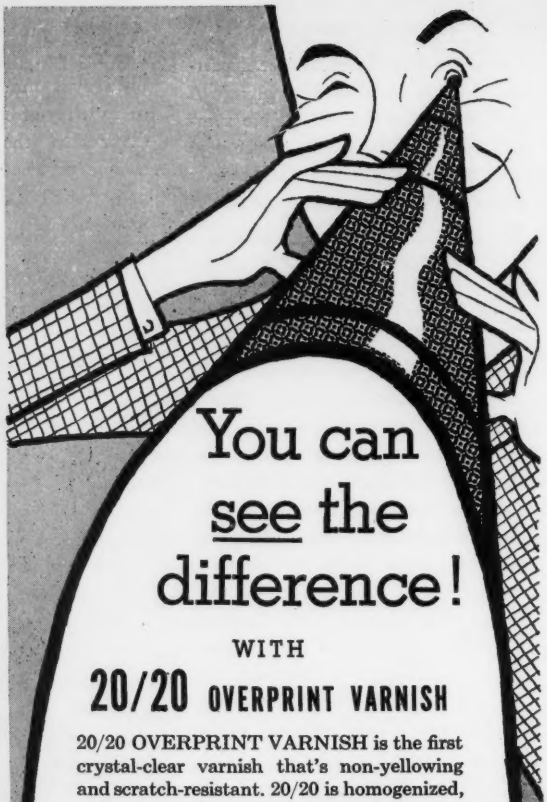
SIZE . . . . .
Company . . . . .
By . . . . . Zone . . . State . . . . .
City . . . . .

A.E. HANDSCHY CO.

Manufacturers of Fine Letterpress and Offset Printing Inks

CHICAGO 7, ILL. 125 South Racine Avenue
MINNEAPOLIS 15, MINN. 422 South Third Street
INDIANAPOLIS 4, IND. 225 North New Jersey St.

DISTRIBUTORS
Handschy Distributors located in all principal cities. Write for name and address of Distributor nearest you.



You can see the difference!

WITH

20/20 OVERPRINT VARNISH

20/20 OVERPRINT VARNISH is the first crystal-clear varnish that's non-yellowing and scratch-resistant. 20/20 is homogenized, will not settle out, can be used without additives. Fast drying on stock or printed surface. Ideal for use on soap, detergent, chemical labels—20/20 is acid-alkali proof. Equally good results in letterpress and litho. Every batch is "run tested" and the film is certified scratch-resistant on the Southerland Rub Tester. Try 20/20—YOU CAN SEE THE DIFFERENCE!

GLAZCOTE INK CONDITIONER

Homogenized GLAZCOTE makes all inks tougher, glossier, and highly resistant to scratches. Blends readily, equally good for letterpress and litho.

WRITE TODAY for your money-back trial offer. Satisfaction guaranteed!

Manufacturers of Hypothiolate, Hypothiolate HA 301, Bytaneum, 33 and 0-33 Ink Conditioners, Klemm Fluorescent Inks.

Central

COMPOUNDING CO.
1720 North Damen Avenue
Chicago 47, Illinois

EXPORT: Guiterman Co., Inc. New York 4
CANADA: Canadian Fine Color Co., Ltd., Toronto

sheets to a predetermined length and stacks them ready for various jobs.

Because its business centers around coupons and labels, Eureka relies heavily on the step and repeat process. Some of Eureka's clients have access to art services and send in their own designs, but to service accounts where there is a need for it, management has provided a well-staffed and equipped art department.

Offset printing is done on both web and sheet-fed presses. Some of the longrun monochrome and color work is done by gravure, while letterpress is largely restricted to serial numbering and rule cutting.

Passing through the several pressrooms at the Scranton plant, a visitor is impressed by the well-lighted, well-ventilated work areas, the careful housekeeping and safety precautions and the meticulous inspection of jobs in all stages.

After being lithographed, the sheets of stamps and coupons move into the serial numbering operation, where identifying letters and numerals are overprinted.

Over the years Eureka has perfected die-perforating methods so that stamps and seals may be detached more easily from the sheets.

Put Into Booklets

Sheets of trading stamps are assembled and bound into booklets of 5,000 or 10,000 stamps for the convenience of the merchants who issue them. These books are assembled, inspected, packaged and on their way to Eureka customers soon after the sheets of stamps come off the production line, sometimes the same day.

Among the more unusual Eureka products have been stamps for foreign governments, tax stamps for various states and other items of monetary value. Press counters and manual counting at each step assure that every sheet of valuable stamps or seals is accounted for. Imperfect sheets, which have a possible money value, are removed and immediately shredded and burned.

Eureka's skill in making and printing gummed paper led to development of a line of mailing, warning and similar labels. The gummed stationery line has expanded until it now supplies a wide field in both decorative and commercial items.

In 1951, Eureka's management took its first step off home base by opening a subsidiary plant in Danville, Ill. In this way Eureka reduced shipping costs and improved service to the Midwest on many of its products.★

COLOR STRIPPING

(*Continued from Page* 44)

mentary blueline flats for the printing color. One will be used for stripfilm only and the areas for the cut film sections will be opaqued or masked out. The second flat, to complement the first, will carry the assembly of cut film sections and the corresponding stripfilm detail areas will be blocked out. The platemaker will then make his plate by exposing the first flat in position, and then replace it with the second flat for the second exposure. Both flats can be successively registered to engraved lines in the press-plate. Or the second flat can be

SERVICE PLUS QUALITY!

HAS MADE OUR PLANT THE WORLD'S FINEST

We Specialize in all sizes
MULTILITH and DAVIDSON PLATES

LITHOGRAPHIC PLATE GRAINERS ASSOCIATION INC. MEMBER LPG

All Sizes ZINC and ALUMINUM PLATES
Ungrained-Grained-Regrained

35-51 Box Street Tel. EVergreen 9-4260-4261 Brooklyn 22, N. Y.

Founded 1920

Your Printing Deserves the Best

Howard Flint Ink Co.

Gravure • Letterpress • Lithographic • Flexographic

ATLANTA • CHICAGO • CLEVELAND • DENVER • DETROIT • HOUSTON
INDIANAPOLIS • LOS ANGELES • MINNEAPOLIS • NEW ORLEANS • NEW YORK • TULSA

Are YOU ready . . . . for '56

The YEAR of DESTINY . . . for the Graphic Arts?

The PRINTED sales-message has come into its own . . . because it's the BEST-PAYING advertising dollar.

**More money spent on Direct Mail than on Television.
TWICE as much spent on Direct Mail as on Radio.
$451,000,000. MORE Direct Mail in 1954 than in 1950.
(1955 will reveal STILL more and '56 . . . the sky is the limit)
$1,374,009.000. spent on Direct Mail in '54.**

Is it any wonder that in three weeks recently, 181 firms ordered the NEW "Gold-Mine" BAUMFOLDER . . . to get the greatest possible profit in '56 of the most profitable printing . . . naturally, Direct Mail Printing (and it ALL has to be FOLDED . . . and FOLDING is the most profitable of all operations).

**It Cuts. — It Scores. — It Perforates — It Pastes.
(Will fold . . . paste and trim 6,000 booklets an hour)**

Printing is the ONE INDISPENSABLE INDUSTRY. (Way back Charles Dickens eulogized it as such and every thinking man knows it).

Over twenty thousand firms testify the "Gold-Mine" BAUMFOLDER is the ONE INDISPENSABLE AUTOMATIC in their plant.

It is our pleasure to offer the fabulous NEW MODELS on pay-for-itself terms . . . and every size priced at a fraction of what you'd expect for the closest-precision-built . . . life-time "Gold-Mines."

This is the HOUR of DECISION. Won't you accept one or more than one NOW, realizing how MUCH it will COST you to try to compete without it, yet costs NOTHING to OWN it, because DAILY AND FOR A LIFE-TIME "it puts money IN thy purse."

RUSSELL ERNEST BAUM, INC.

615 Chestnut St., Phila. 6, Pa.

14 x 20 17½ x 22½ 22 x 28 25 x 38 31 x 46 . . . 60

Schultz

DEEP ETCH

CHEMICALS

Leading litho plants have been standardizing on Schultz Chemicals for over a decade.

SCHULTZ DEEP ETCH CHEMICALS

1240 W. Morse Ave., Chicago 26, Ill.

NEW REDI-SET OFFSET INKS

For faster handling of freshly printed sheets and to eliminate offset transfer. REDI-SET inks are produced in all the brilliancy and shade variation of conventional systems, but have hard, scuff-proof films and exceptional quick-setting properties.

Write for samples and details.

A Division of Sun Chemical Corporation

GPI

General Printing Ink Company

10th Street and 44th Avenue
Long Island City 1, New York

Offices and Service Plants in Principal Cities

DIVISIONS OF SUN CHEMICAL CORPORATION

HORN • HUDSON • WILLEY (paints, maintenance and construction materials, industrial coatings) • WARWICK (textile and industrial chemicals) • WARWICK WAX (refiners of specialty waxes) • RUTHERFORD (lithographic equipment) • SUN SUPPLY (lithographic supplies) • GENERAL PRINTING INK (Sigmund Ullman • Fuchs & Lang • Eagle • American • Kelly • Chemical Color & Supply Inks) • MORRILL (news inks) • ELECTRO-TECHNICAL PRODUCTS (coatings and plastics) • PIGMENTS DIVISION (pigments for paints, plastics, printing inks of all kinds)

positioned to register marks in the plate margins resulting from the first exposure and that are developed out locally to make them visible.

When exposing positive assemblies, close subject border masking is required between complementary flats to avoid unexposed strips showing between the subjects and the accidental exposure of printing detail appearing on the other flat. The two flats must be checked against each other, first by superimposition, and then preferably by double printing on brownprint paper in a vacuum frame.★

PHOTO CLINIC

(*Continued from Page 77*)

densitometers generally give diffuse density values. Instruments of the same make and design would give the same type of density values.

To make sure that each densitometer is functioning properly you should obtain calibrated wedges from the manufacturers of both instruments. With these you can check each densitometer. From this you can also work out a table which establishes the relationship between the two densitometers if they have been found to be correct. On the basis of this relationship, or coefficient chart, you can translate the readings of one densitometer into the values of the other. This will result in the same set of values for all further calculations.★

TECHNICAL BRIEFS

(*Continued from Page 69*)

means controlled in accordance with the character selected for controlling said instant of the flashing of said light within a single revolution of said character carrier to effect the flashing of the selected character upon said film, means for sensing the width of the selected characters, and means controlled in accordance with said width sensing means for causing said rotating means to rotate a predetermined whole number of revolutions to advance said film proportionately in accordance with the width of the selected character to effect the proper number of increments of film advance to accomplish the spacing of the character in the line.

*PHOTOGRAPHIC TYPE COMPOSITION. *U.S. 2,714,843.* Frederick J. Hooven. *Official Gazette* 697, No. 2, August 9, 1955, Page 177 (1 page). 1. In a photocomposing machine the combination of means for selecting characters and word spaces to form a line of composition, a continuously rotatable character carrier having characters of different width located in different angular positions thereon, coded data on said carrier associated with each of said characters indicative of the width thereof, a register continuously rotatable in coordinated relation with said character carrier and having a series of zones in angularly spaced positions thereon, said zones having a plurality of recording tracks, means controlled by said character and word space selecting means for selecting a sequence of zones on said register corresponding to the positions of selected characters in said line of composition, means for recording in said zones on certain tracks thereof coded data identifying the selected characters, and means for recording on another track of the same zones of said register a corresponding sequence of coded data indicative of the width of said selected characters.

"3" BRAND MAKEREADY IS A REAL TIME SAVER. *American Printer and Lithographer* 136, No. 8, August, 1955, Page 46 (1 page). A new product which gives a new approach to letterpress makeready has been announced by Minnesota Mining and Manufacturing Co. It is called "3M Makeready" and reportedly provides letter for letter and dot for dot pressure correction automatically and at a time saving. In practice, the first printed proof is made on the Makeready Paper. Processing in dry-process machine causes plastic coating to rise in relation to ink density. Heavier ink density means greater rise. The Makeready sheet is then buried 12 mils down in the pressure cylinder packing and pressrun is ready to start.

NEW RCA TUBE SIMULATES TYPESETTING. *American Printer and Lithographer* 136, No. 7, July, 1955, pp. 46-47 (2 pages). A new electron-image tube that can translate coded signals from tape, keyboard or radio into clearly defined letters and figures at speeds up to 100,000 words per minute for high-speed photographic recording was announced recently by Radio Corporation of America. The new tube fills an acute need for high-speed printing devices operating directly from data in coded form. When it achieves commercial form, its initial application is likely in electronic message transmission and computing systems. Further development is expected to fit it for wider application in general printing as an electronic means of typesetting. In operation, the tube simulates typesetting in selecting letters and figures one by one from a "font" and placing them in luminous form on the 5-inch circular tube face either in line or in any pattern desired. The ability to place the characters where they are wanted gives the tube wide flexibility for such tasks as producing financial statements, balance sheets and bills, where letters and figures must be placed in various positions on a form.

Stickin' Around with KLEEN-STIK

Puts "Pay" in "Display"

What does? KLEEN-STIK, of *course!* Practically *every type* of P.O.P. display and label "pays off" *better* when you add the peel-an'-press *usability* of this marv'lus adhesive. More dealers and salesmen *use* 'em . . . more buyers *see* 'em!

3-Way Bottle "Booster"

To boost *all* bottle goods sales, GLASS CONTAINER MFRS. INST., New York, furnishes this "triple-threat" piece to *6,000* U.S. bottlers. Creased lengthwise, a giant bottle-cap "pops up" for use as a "shelf-talker" . . . cut off at the score, it *wraps around* a pyramid of bottles, or forms a *colorful sign* for wall, window, or truck. Either way KLEEN-STIK STRIPS get it up *easy* and *keep* it up! Slick KLEEN-STIK application by GCMI Mktg. Director R. L. CHENEY, in league with JIM LEINDECKER and JOEL CONRON of KENYON & ECKHARDT ad agency.

"Able" Airline Label

To control "carry-on" baggage, AMERICAN AIRLINES uses this colorful gold foil label, backed with *special* KLEEN-STIK adhesive. The ticket clerk puts each piece of baggage thru an ingenious "bag tester", and presses a label on each approved piece. And here's the "gimmick"—due to the special adhesive, the label *cannot* be removed without destroying it! (However, it sticks *permanently* for use on future flights.) ALLEN HOLLANDER CO., INC., N.Y.C., did the "able" production in rolls for use with hand or automatic dispensers.

Have you a favorite KLEEN-STIK display or label you'd like to see featured in this column? Send us a sample and full details, including the names of the people responsible for designing and producing it. There's a *valuable* surprise prize for every contributor!

KLEEN-STIK PRODUCTS, INC.

7300 West Wilson Avenue • Chicago 31, Ill.

Pioneers in pressure sensitives to the trade

Schultz

DEEP ETCH

CHEMICALS

Proved dependable and economical in leading litho plants for more than a decade. You too will find it profitable to standardize on Schultz Chemcals for all your deep etch requirements.

SCHULTZ
DEEP ETCH
CHEMICALS

1240 W. Morse Ave., Chicago 26, Ill.

HILL RUBBER CO., INC.

GOOD-YEAR *Rubber for Printing*

BEST IN RUBBER — BEST IN SERVICE

2728 Elston Ave. • Chicago 47, Illinois
731 Commonwealth Ave. • Massillon, Ohio
3510 Gannett St. • Houston 25, Texas
16048 Via Paro • San Lorenzo, Calif.

HILCO
GOOD-YEAR
VELVA-TONE
OFFSET PRESS BLANKETS

★ IN CHICAGO STOCK ★

Supplies for Rubber Printers

Prices on Request

"SERVICE IS OUR BUSINESS"

"The Single Color Offset Press"

by I. H. Sayre

Different types of offset presses are detailed; then the step by step mechanical operation and adjustments of four Harris-Seybold Co. presses — the earlier sheet-fed LSB and LSN, and the newer models with selective (21 x 28). Webendorfer presses (Chief, Little Chief and Big Chief) are discussed with complete instruction for operation, followed by a discussion of the larger presses — the EBCO (Miller Printing Machinery Co.) and the Miehle 29 and Miehle 36.

The book points up the general similarity of handling of the various presses, at the same time explaining the special characteristics of each. Primary objective of the book is to acquaint the reader with the precision and care that is required in handling offset presses, and to demonstrate how to obtain trouble-free operation.

In addition to the specific treatment on presses, there is a section on blankets, papers, inks, rollers, plates, fountain solutions, and other materials used by offset lithography.

The book is cloth bound in bright red, washable cover, 255 illustrations, printed on offset enamel stock, and sewed 16" so that it lays open flat. $6.50 plus postage.

MODERN LITHOGRAPHY
Box 31, Caldwell, N. J.

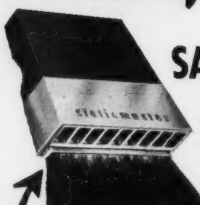
Enclosed is payment. Please send "The Single Color Offset Press".

Name .....
Street .....
City ..... Zone ..... State .....

One Swoop with STATIC master

Cleans negatives and/or plates

SAVES TIME · LABOR · MONEY



Hundreds of Lithographers have become enthusiastic users of the revolutionary STATICMASTER brushes. The ionizing agent, a strip of polonium, immediately neutralizes all surface static electricity. The soft brush bristles remove all dust, lint and foreign matter. And most important—the surface stays clean.

The POLONIUM Strip does the trick

Order STATICMASTERS from lithographic supply houses

Professional 3" Size $12.50

NUCLEAR PRODUCTS CO. 10173 E. RUSH ST. DEPT. 53 EL MONTE, CALIF.

PRINTABILITY

(*Continued from Page 53*)

being developed, attempt to measure rupture not fuzz, lint, scale or what have you.

Opacity occupies a position of consequence among the attributes of a printing paper. Opacity standards in the papermaking world have become highly competitive. Considerable effort and expense are pumped into the sinews of papermaking equipment for the achievement and maintenance of opacity standards. However, this can go all to naught unless the paper has the proper penetrative qualities. For example, when printing two sides, opacity is meaningless, should the paper allow the ink to penetrate too deeply.

Moisture Is Big Factor

Moisture content, because of its ramifications, should be discussed only in book length if the subject is to be covered completely enough to preclude any misunderstandings. Nonetheless, a few remarks are given here:

Paper is very hygroscopic. Care must be exercised if any change in desired moisture content is to be prevented. Both the papermaker and the lithographer are fully aware of the problems which changes in moisture content can cause. Misregister due to dimensional changes in the paper brought about by moisture content variations is familiar. Curl and wavy edges are other examples of the results of moisture content changes. Moisture is controlled on the paper making machine and expensive instruments for measuring moisture content, some utilizing radioactive materials, are brought into play. Yet, all this effort can be wasted if the paper is subsequently mishandled and exposed to humidity conditions not in balance with that of the paper. The future will find the papermaker using additives which will prevent the entrance and exit of moisture to and from the sheet once the sheet has been given a specified moisture content. The problems of dimensional stability, to the extent it is affected by moisture, will then be a curio of the past.

Compressibility describes the ability of paper to cushion and compensate for the irregularities of the printing plate or in the surface of the paper itself. This is a difficult quality to control because it can not be measured easily. A rough paper, if resilient, would result in a better printing job than a rough paper with little resiliency.

Smoothness of surface is a requisite for printing jobs in which the fine details of the printed image are to be true and sharp. The contour of the half-tone dot is defined more sharply on a smooth paper than on a rough paper. This is due to the manner in which the ink spreads out under the influence of printing pressure. On rough paper ink is inclined to follow the irregular pattern of the peaks and valleys, whereas, on smooth-surfaced paper fewer obstacles are present to inhibit uniform dispersion.

The papermaker is energetically and enthusiastically delving into the task of keeping the printer and lithographer stocked with paper which will meet his needs. Since the objective, a perfect printed image, is the common goal of papermaker, printer, and ink maker, one would expect a more intimate working relationship among the three. The present lines of contact and liaison are not very strong considering the dependency of each on the other. More open channels for a ready exchange of information on research, development, and production problems should exist. This would help develop a more thorough understanding of mutual problems and facilitate progress on all phases of work pertinent to the relationships. It might even prove feasible and beneficial if a program of personnel exchanges, of a temporary nature, could be formulated among printing and lithographing firms, paper mills, and ink houses. In any case, the existing avenues of communication must be strengthened if the papermaker, paper user, and inkmaker are to reach the goal of better printability.★

SPLCORP

Hydro-Pressed Rigid Plastic Sheets

VINYL	ACETATE	POLYETHYLENE
POLISHED-POLISHED (P.P.)	POLISHED AND MATTE (P.M.)	MATTE AND MATTE (M.M.)

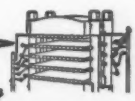
SPLCORP is recommended as the only dimensionally stable substitute for glass, when Stripping Positives or Negatives for Multi Color Work, if close registration is desired.

A few advantages enjoyed by the Lithographic Craftsman when using SPLCORP sheets are: Easy Handling, Increased Production, Job Assurance, No Breakage, and No Storage Problems.

SPLCORP is manufactured in thickness ranging from .005" to .1", and is available in Transparent, Translucent, or Opaque, with either a Mirror Polished or Matte Finish on one or both sides.

WE ARE THE ORIGINAL PROCESSORS OF RIGID SHEETS IN SIZES OVER 36" x 48"

Write for samples and latest Price Lists



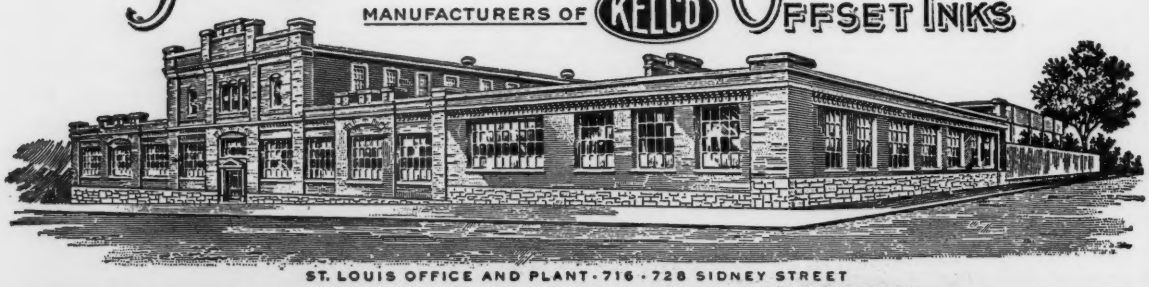
SCRANTON PLASTIC LAMINATING CORP.

Laminating . Press Polishing

3218 PITTSTON AVENUE Phone: Scranton 2-0407. SCRANTON 6, PENNSYLVANIA

Joseph F. Kelly, Inc. Saint Louis

MANUFACTURERS OF KELCO OFFSET INKS



ST. LOUIS OFFICE AND PLANT · 716 · 728 SIDNEY STREET

DRY OFFSET PLATES on MAGNESIUM

Line & Halftone Combination
Black & White and Color
Also Four-Color Process
All sizes up to 48″x72″ on
.025″ or .016″ Magnesium

•

We also service letterpress printers with Magnesium printing plates. 16 gauge or 11 point, blocked or unblocked.

•

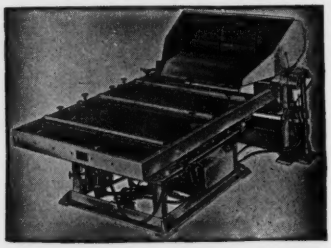
24-Hour Service • Prices on Request

Address all inquiries to:

COLOR PRINTING DIVISION of the TRENTON TIMES

600 Ingham Ave. Trenton 8, N. J.

CRISP-VELVET-GRAIN



35 years experience graining plates that please both platemaker and pressman

All sizes ZINC and ALUMINUM PLATES

Ungrained—Grained—Regrained

WILLY'S Plate Graining Corp.

34-12 10th Street
Long Island City 6, N. Y.
Phone RA 8-1526

LITHOGRAPHIC PLATE GRAINERS ASSOCIATION, INC. MEMBER LPG

Member, Lithographic Plate Grainers Association, Inc.

MAKERS OF THE
FINEST QUALITY COLOR PLATES
FOR
OFFSET
LITHOGRAPHY

S

THE
STEVENSON
PHOTO COLOR SEPARATION CO.
400 PIKE STREET
CINCINNATI 2, OHIO

Harry J. Leahy (upper, left) is president of Magill-Weinsheimer. The art department is shown in the upper right photo. Lower left is the company's new Miehle No. 76 four-color offset press, and John R. Webb, sales manager is shown (lower right).

Much of the noise caused by this huge, four-color offset press is absorbed by Fiberglas acoustical form board which also serves as a permanent form for the roof deck and roof insulation.

ML PLANT TOUR

(*Continued on Page* 40)

products are displayed, is included in the layout.

Dedication of the new plant took place in mid-September during a three-day series of open house receptions for customers, suppliers, industry friends and local community civic dignitaries. One floor at 1322 S. Wabash avenue, was leased to start the business in 1906. Stone lithography was never attempted, although transfer operations were used until 1916. For two years business was anything but good, but, in 1908, an order came in for 1,000,000 copies of a picture of William Howard Taft for use in the presidential election campaign.

"That launched the company. In 1923 we bought the 10-story building from the Coca-Cola people and later acquired two adjacent buildings two and three stories high. These quarters have been our home continuously for 50 years until now," Mr. Weinsheimer said.

Magill-Weinsheimer, which holds more than 150 copyrights and patents has scored many firsts in its industry. It was the first to create a flasher display, in 1926; it was one of the first to lithograph in a four-color process, and it was the first to develop and produce jumbo-size enlargements for point-of-sale merchandising by mechanically enlarging printed artwork from national magazines for valuable tie-in advertising in stores and retail outlets.

The company's displays are attention-getters and one once caused a traffic jam at the busy intersection of Randolph and State Streets in downtown Chicago. The company had designed a toothbrush display which showed water pouring from a faucet, apparently suspended in mid-air with no visible attached pipes to carry the water. Crowds were drawn to the drug store window featuring the display and police appealed to the store to remove it and get traffic moving again.

Of the total working force of 426, 103 have been with the firm more than 10 years. Fifteen per cent of the total have been with Magill-Weinsheimer more than 25 years and five per cent have been with the firm 20 to 25 years.

John B. Kruft, Magill-Weinsheimer vice president and project director was responsible for the design and construction of the building.★

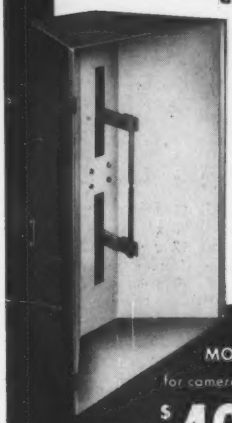
NEW!

REVOLUTIONARY ARC LAMP
Eliminates
Bouncing and Sputtering!

nuArc

HI-LITE

WITH AUTOMATIC ARC CONTROL



for use with cameras and printing frames

MODEL H-66
for cameras through 31"
$495.00 per pair

Another first for the industry! Only the new nuArc Hi-Lite lamp comes with an exclusive, automatic arc control that eliminates bouncing and sputtering!

Constant powerful light gives uniform intensity and color temperature — assures perfect dot structure and line definition.

The Hi-Lite is equipped with many other up-to-date features. Truly revolutionary from the standpoint of efficiency, economy and construction. You'll be convinced when you use it!

30-DAY TRIAL OFFER

Use a Hi-Lite lamp for 30 days. If after this period you find that you can get a superior lamp for the same low price, we will gladly permit its return for full credit.

Three models to suit your needs. Write now for Bulletin No. 600M.

nuArc Company, Inc.

General Offices and Factory:
824 S. Western Ave., Chicago 12, Ill.
Eastern Sales and Service:
215 Fourth Ave., New York 3, N. Y.

'BARTELS'

FRESH GUM

SOLUTION 14°

Stays fresh! Ideal for developing pre-sensitized Photo-Offset Plates

GORDON BARTELS CO.
ROCKFORD, ILL.

'BARTELS'

DEEP-ETCH COATING

Flows Without Streaks
Best for fine or grainless plates

GORDON BARTELS CO.
ROCKFORD, ILL.

'BARTELS'

ETCH-GUM

Combines two operations
Safe! No chromates
Ask your dealer

GORDON BARTELS CO.
ROCKFORD, ILL.

A-1 USED PRESS EQUIPMENT

Harris 42 x 58 2/c Model LSK
Harris 50 x 68½ 2/c Model LSG
Harris 42 x 58 2/c Model LTL
Mann 35 x 45 Two Color
Harris 22 x 34 1/c Model EL

BOX M MODERN LITHOGRAPHY

"OK"ie Developing Ink
"OK"ie Negative Opaque

Cameras, Lenses, Screens,
Arc Lamps, Printing Frames,
Whirlers and Sundries

Write today for prices and full information

E. T. SULLEBARGER CO.
114 LIBERTY ST., NEW YORK (6)
Phone: BEekman 3-9234

Modern Lithography
Box 31, Caldwell, N. J.

Send Modern Lithography, starting with the current issue, as indicated.

1 Yr. $3 ☐ 2 Yr. $5 ☐ Payment Enclosed ☐
Send a Bill ☐
Foreign Rates Higher (see page 5)

Name .....

Street .....

City ..... Zone ..... State .....

DOT ETCH PROCESS
Color Plates

PROMPT SERVICE
HALFTONE NEGATIVES & POSITIVES
DEEP ETCH PRESS PLATES

ZARWELL & BECKER
Offset Platemakers
223 N. WATER STREET • MILWAUKEE 2, WIS.

For Best Quality

MODERN LITHOGRAPHY
Box 31, Caldwell, N. J.

Enclosed is payment. Please send "Operation of Offset Press."

Name .....

Street .....

City ..... Zone ..... State.....

OPERATION OF THE OFFSET PRESS

by Theodore F. Makarius

A 254-page practical reference book on operation of modern offset presses with special chapters devoted to paper conditioning, inks varnishing, drying. storage of plates, and other subjects of interest to the offset pressman. An ink Problem Reference Chart lists 28 of the more common problems, how to identify each, and the possible cause and remedy.

More than 50 pages of case histories are given with solution to press problems outlined. Eighteen illustrations, some in full-color in the chapter on inks, are included.

Mr. Makarius, who is with Pope & Gray, Inc., Clifton, N. J., also is the author of ML's Production Clinic.

The book is lithographed with a flexible, green, leather-like, pebble grain cover. $10.00 *per copy.*

Classified ADVERTISING

All classified advertisements are charged for at the rate of ten cents per word, $2.00 minimum, except those of individuals seeking employment, where the rate is five cents per word, $1.00 minimum. One column ads in a ruled box, $7.50 per column inch. Check or money order must accompany order for classified advertisements. Address replies to Classified Advertisements with Box Number, care of Modern Lithography, Box 31, Caldwell, N. J.

Help Wanted:

PREMIUM HELP WANTED: Fully qualified and experienced Dot Etcher for high quality multicolor work. Permanent situation, premium pay, no layoff. Largest plant in Pacific Northwest, where there is room to live, and living is a pleasure. Address Box 10, c/o *Modern Lithography.*

CAN YOU QUALIFY? Ohio lithographer operating 5 singles is considering purchase of new 2-color 22 x 34 Harris. Opportunity for qualified 2-color pressman to act as working foreman to start at scale plus generous monthly premium. Give complete details of your experience, previous connections and references. Reply will be held in strict confidence. Address Box 11, c/o *Modern Lithography.*

Chemist or Chemical Engineer

Research and development on platemaking processes and chemicals in plant of prominent manufacturer of lithographic supplies. Some customer service with limited amount of travel. Opportunity for man desiring opportunities to use own initiative and do independent work.

Reply will be held in strict confidence.
Address Box 22 c/o Modern Lithography

MEN WANTED—POSITIONS OPEN

Superintendent—Letterpress	MIDWEST	$ 7,000
Production Mgr.—Estimator Offset-Letterpress	OHIO	6,000-6,500
Asst. Superintendent—Offset	MIDWEST	6,000-7,500
Foreman—Offset Pressroom	TEXAS	7,000
Working Foreman—Litho Camera & Plate Dept.	MIDWEST	6,500-7,000
Foreman—Pressroom	SOUTH	6,000
	SOUTH	6,000
Bindery	OHIO	6,000
Design Engineer	MIDWEST & NEW ENG.	7,200
Chief Industrial Engineer	NEW ENGLAND	5,400-7,800
Salesman—Offset Supplies	EAST	TOP SALARY

WANTED: Cameramen, platemakers, strippers, pressmen, compositors, proofreaders, monotype, folder operators, binderymen, etc. Offset pressmen in high demand.

GRAPHIC ARTS EMPLOYMENT SERVICE
Helen M. Winters, Mgr.
Dept. M-1, 307 E. 4th Street
Cincinnati 2, Ohio
List Your Confidential Application With Us

SALARY 5 figures. Salesman with customers or with contacts. We have the largest quality photo-engraving and offset plate making plant in Chicago. Please phone Mr. Sutte, DE 7-1277 or write for appointment. Jahn & Ollier Engraving Co., 817 W. Washington Blvd., Chicago, Illinois.

JOURNEYMAN lithographic stripper, stripper-platemaker, and color process camera man needed in Miami, Florida, steady position. Address Box 25, c/o *Modern Lithography.*

Situations Wanted:

OFFSET COLOR CAMERAMAN—experienced magenta masking. Have worked with A.T.F.-Robertson Levy-Consolidated and Lanston Overhead Cameras with glass screens, magenta and neutral gray contact screens. Capable of converting quality B & W shop to quality color shop. Address Box 13, c/o *Modern Lithography.*

RELIABLE CAMERMAN-STRIPPER: desires position with progressive firm with chance to learn color. Eight years in the graphic arts, graduate photo school. Northeast section preferred. Correspondence invited. Address Box 14, c/o *Modern Lithography.*

COMBINATION Cameraman, Stripper and platemaker with 25 years experience, 14 years of which were as department foreman, seeks position as working foreman in small or medium sized plant. Address Box 20, c/o *Modern Lithography.*

EXCEPTION AL INK & LITHO SUPPLY EXECUTIVE NOW AVAILABLE! Modern Lithography has just learned that a man with over 25 years experience in the ink and litho supply field is open to the best proposition. This man has a fine record in administrative work and for the past 20 years has been Secretary and on the Board of Directors of his company. Contact *Modern Lithography* Box 21.

WANTED: A progressive Lithographer who is looking for a technical specialist to assume responsibility for plant improvement in methods, standards and control, with emphasis on color. Box 18, c/o *Modern Lithography.*

WANT TO RELOCATE. Desires position as two color pressman or foreman, twenty years experience in the trade. Correspondence invited. Address Box 23, c/o *Modern Lithography.*

TECHNICAL SPECIALIST: With outstanding record of achievement as technical advisor. A unique background of practical experience in lithographic production, trouble-shooting and trade training. Interested in responsible position with progressive plant involving technical supervision and in-plant training. Would also consider commensurate position with supplier or equipment manufacturer. Address Box 19, c/o *Modern Lithography.*

Thoroughly experienced metal decorating pressman wishes to make change. Capable of handling press, roller coating and shear department. Address Box 15, c/o *Modern Lithography.*

WANTED: a position as Platemaker. Have twenty years experience in first class color work. Photo-machine operator. Address Box 16, c/ *Modern Lithography.*

For Sale:

FOR SALE: — 1-Rollfed Offset Press, takes roll up to 26" wide with 17 3/8 cut-off, both sheet and rewind delivery. 1-Headliner with 16 masters. 1-22x28 Baum #322 Folder, new in 1953. Knight Press, 4 N. Broadway, Baltimore 31, Md. Eas. 7-4444.

HERBERT P. PASCHEL
Graphic Arts Consultant

Methods Analysis — In-plant Training
Trouble-Shooting — Color Correction Systems

118 East 28th St.—New York 16, N. Y.
MUrray Hill 6-5566

EGA

the RELIABLE Supplier to the Lithographer
for SERVICE call BRyant 9:8480
EASTERN GRAPHIC ARTS SUPPLY CO.
254 W. 31st STREET • N. Y. C.

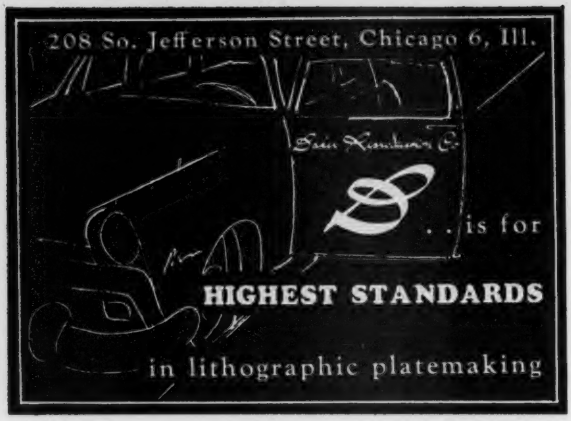
Ink Drafting
Line Work for Offset

Fast, dependable service. Personal attention at all times. Send sketch or description of work wanted.

Lowest quotations submitted promptly. No obligation. 20 years drafting experience.

Christie Batlas
17 IRVING PLACE SUMMIT, N. J.

208 So. Jefferson Street, Chicago 6, Ill.



. . is for
HIGHEST STANDARDS
in lithographic platemaking

W.D.WILSON
PRINTING INK COMPANY LTD.
Fine Printing Inks
LETTERPRESS LITHOGRAPHY
Est. 1865
5-38 46th AVE., LONG ISLAND CITY, N. Y.
TEL.: STILLWELL 4-8432

DRYING
for
WEB-OFFSET
GRAVURE • LETTERPRESS
Over 25 Years Dryer Experience
B. OFFEN & CO.
168 N. Michigan Ave., Chicago (1), Ill.

Efficiency Approved
A Film Scribing Tool
scientifically designed for
Ruling Negatives

Litho Ruled Forms - QUICKER - EASIER - BETTER
★ Perfect uniformity of rules — no film spoilage.
★ 6 cutting heads in set: 4 for single rules from hairline to 1-point rules; 2 cutting heads for double rules.
A postcard will bring descriptive literature
1729 East 4th St. Scriber Specialties DULUTH MINNESOTA

GRUMBACHER GRAPHITE OPAQUE
SMOOTH...no bubbles, holes or high spots...FLAT
FAST...one brush stroke for complete opacity...EASY
CHIP-PROOF...adheres without crawling...OPAQUE
SAVES...production time on opaquing strip-film, glass plates or negatives

SEND FOR FREE SAMPLES
M. GRUMBACHER, inc.
477 West 33rd St., N. Y. 1, N. Y.

OFFSET PLATES COMPLETE
Deep Etch — Albumen — Presensitized
NEGATIVE SERVICE
Line and Halftone
OFFSET SUPPLIES
PROGRESSIVE LITHOPLATE AND SUPPLY CO.
435 N. State Street Chicago 10, Ill.
Phones: SUperior 7-8116-8117-8351

DRY PLATES
FILM
PHOTO CHEMICALS
Lenses, Contact Screens and accessories for the camera and darkroom
K. SCHLANGER
333 West Van Buren St., Chicago 7, Ill.
WEbster 7540

OFFSET PLATES
Surface, Deep-Etch and Copper Plates
STEP & REPEAT OFFSET PLATES
UP to 35" x 45"
MULTIPLE LINE & HALFTONE NEGATIVES
FOR THE TRADE
We Operate No Presses
Graphic Arts
Service Company
390 Orange St., S.W. ATLANTA, GA
PHONE: CYpress 5934

FOR SALE: Harris L.S.B. Offset Press, Excellent condition. Clipper Lithograph Co., 16201 Waterloo Road, Cleveland 10, Ohio.

RUTHERFORD Photo-Composing Machine. Type PLC. Plate size 50" x 69" complete. Excellent condition. $8,000.00 f.o.b. Floor. Manufacturing Department, H. S. Crocker Co., Inc., 1000 San Mateo Avenue, San Bruno, California.

FOR SALE: Modern Printing and Lithographing Plant in one of fastest growing cities in Southwest. All modern equipment. Volume approximately $300,000. Can be increased. Wire, write or phone. Jones Graphic Products Company, 320 Broadway, SE, Albuquerque, New Mexico.

FOR SALE: Little Chief 14 x 20 Offset Press. Rebuilt like new. Terms if desired. Foster Printing Equipment Co., 13th & Cherry Sts., Phila., Pa., Locust 8-2166.

FOR SALE: Flat and Artwork Cabinets. All sizes. Write for literature. Foster Manufacturing Co., 13th & Cherry Sts., Phila., Pa.

Miscellaneous:

Rubber plates for printing. Free Brochure. Flexography, Box 502, Great Neck, N. Y. AGENTS-DEALERS WANTED: Billbooks, Salesbooks, Continuous Forms, Receipt Books, Carbon Forms, Business Forms. Allan Press, Box 502, Great Neck, N. Y. Free Catalog.

WANTED TO PURCHASE: 40" or 48" Darkroom cameras. Step and repeat machine (Rutherford) 42-59-76. Vertical Whirler 59" or 76". Proof Press Directoplate, Valette or Rutherford. Sizes 22x28, 59" or 76". Circular Screen 133 line and 150 line, sizes 23½, 31½, 36, 40", 48". Prescision Photo Equipment Co., Inc., 1151 W. Grand Ave., Chicago 22, Illinois. Taylor 9-9157.

Perfect situation for top notch litho salesman with a following to start own brokering. Have office facilities in complete offset shop in northern New Jersey, no investment. Address Box 24, c/o *Modern Lithography*.

Self Spraying **STATIKIL**
PRESS BUTTON AND SPRAY — TRADE MARK REG. IN U. S. PAT. OFF.
STOP STATIC ELECTRICITY
$3 PER CAN $30 PER DOZEN
The Original The Only **STATIKIL**
1220 W. 6th St., Cleveland 13, Ohio

FOR *Bychrome* **SCREEN TINTS**
See dealers such as
Roberts & Porter, Kodak Stores, Pitman, So. Graphic Arts Supply, Norman-Willets, Cal-Ink Co., and in Canada Latimer, Ltd.
By Chrome Co., Inc., Columbus 15, Ohio
200 E. Lynn Street, CApital 8-6325

•

ATF Has Spare Parts Kit

Introduction of a group of "Spare Parts Kits" for the use of American Type Founders press customers has been made by the company. The 17 Kits are described in a brochure, available from ATF.

•

NEPCO Grants Total $96,165

Nekoosa-Edwards Foundation, Inc. contributions to religious, educational and charitable organizations totaled $96,165 in 1955, John E. Alexander, Foundation president announced Jan. 4.

Local churches accounted for $14,500 of this amount, while Riverview Hospital received $5,000. Other large grants were $35,000 to the city of Nekoosa to aid in construction of a swimming pool; $4,200 to the South Wood Country Community Chest; $2,500 to the University of Wisconsin for establishment of a medical school fellowship, and $5,200 to the state university for continuance of a research study on insect control in stored pulpwood.

The Foundation's scholarship award program, currently helping nine students attending college, accounted for $9,080 including the addition of a cost of education supplement.

ML ON MICROFILM
All issues of MODERN LITHOGRAPHY are available on microfilm. Libraries and other interested subscribers can contact University Microfilms, 13 North First Street, Ann Arbor, Mich., for price information and copies.

FOR SALE
Heubner
PHOTO COMPOSER, VERTICAL, STEP AND REPEAT (57" x 72") COMPLETELY REBUILT and equipped with pre-register device, arc lamp and hood, chases: 10x12 — 11x14 — 12x15 — 16x22 — 20x24 and 20x26. Price $3.950 F.O.B. New York, N. Y.
The DARLING-PAYNE CORP.
82 Beekman Street
New York 38, N. Y.

NUTRAN PRODUCTS

- Retouching Dyes which lay evenly, penetrate easily into the emulsion and are fast to light.

  Neutral Grey
  Blue Black
  Vermilion
  Red
  Sepia

  and special shade which are close to silver densities, etc.
- Retouching Dye Remover.
- Staging lacquers for liquid masking.

  Overlay Lacquer
  Cutting Lacquer
  and Thinners
- Opaques, which flow well, leave thin film. Do not crack nor peel.

  Black Graphite
  Alcohol
  Turpentine
  Red Water Soluble
- Quicktone, an aid to stripping.
- Electronic Control Equipment.

  Densitometer, Reflection Meter, Timer,

  Photo-electric Register Control for Web Rotary Presses—Slitters—Folders
- Selvyt Cloth — lint free for dry polishing of screens and lenses.

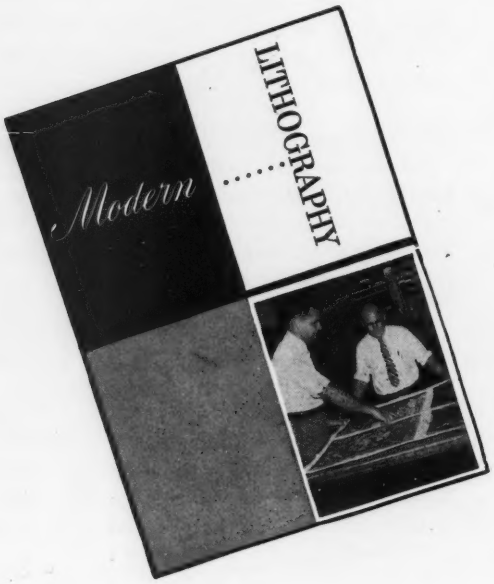
  Plexiglas Trays

11 x 14, 14 x 17, 16 x 20, 20 x 24, 20 x 30, 22 x 28, 30 x 40

Request Technical Data

HENRY P. KORN
5 BEEKMAN STREET
NEW YORK 38, N. Y.
REctor 2-5808

Now's to for 12 issues of



Take a you be the

by getting in a group subscription at special reduced rates . . . in groups of Four or more - $2 per year.

Modern Lithography

P. O. Box 31 **Caldwell, N. J.**

Index to ADVERTISERS

JANUARY, 1956

Acrolite Products Inc. 25
Aljen Associates ..... Dec.
American Graded Sand Co. ..... Dec.
American Type Founders, Inc. 8-9, 87
Anchor Chemical Co. 115
Ansco 13
Azoplate Corp. ..... Dec.

Baker Reproduction Co. 132
Bartels, Gordon 130
Baum, Inc., Russell Ernest 124
Beckett Paper Co. 57-58
Bensing Bros. & Deeney ..... Nov.
Sam'l Bingham's Son Mfg. Co. ..... Dec.
Bridgeport Engravers Supply Co. 121
Brown, W. A. Mfg. Co. 111
Buckbee-Mears Co. ..... Dec.
Burke & James, Inc. ..... Dec.

Cambridge Instrument Co., Inc. ..... Nov.
Cantine Co., Martin ..... 30, 3rd Cover
Central Compounding Co. 122
Champion Paper Co. 68
Chemco Photoproducts Co. ..... Dec.
Chicago Litho Plate Graining Co. ..... Dec.
Consolidated Water Power & Paper Co. ..... Nov.
Craftsman Line-Up Table Corp. ..... Dec.
Crescent Ink & Color Co. 116
Curtis Paper Co. ..... Nov.

Dayton Rubber Corp. ..... Dec.
DBA Products Co. ..... Dec.
Dexter Folder Co. 15
DiNoc Co. 106
Direct Reproduction Corp. 109
du Pont de Nemours & Co., E. I. ..... Nov.

Eastern Corp. 27
Eastman Kodak Co. 61
Electronic Mechanical Products ..... Dec.

Falulah Paper Co. ..... Oct.
Fitchburg Paper Co. 32
Flint Ink Co., Howard 124
Fox River Paper Corp. 12
Fraser Paper, Ltd. 95

Gaetjens, Berger & Wirth, Inc. ..... Nov.
Gegenheimer Co., Wm. 28
General Plate Makers Supply Co. ..... Nov.
General Printing Ink Co. 124
General Research & Supply Co. ..... Dec.
George Hantscho Co. 114
Gevaert Co. of America Inc. ..... Dec.
Godfrey Roller Co. 10
Goerz American Optical Co., C.P. 120
Graphic Arts Corp. of Ohio ..... Dec.
Graphic Arts Service Co. 132
Grumbacher, M., Inc. 132
Gurin-Rapport ..... Dec.
Gummed Products Co. ..... Dec.

Hamilton & Son, W. C. 75-76
Hammermill Paper Co. 23-24
Handschy Co., A. E. 122
Harris-Seybold Co. ..... 6-7, 4th Cover
Hill Rubber Co., Inc. 126
Hoe, R. & Co. ..... Dec.
Howard Paper Co. 19-20
Hunt Co., Philip A. 66

Ideal Roller & Manufacturing Co. ..... Dec.
Illinois Zinc Co. ..... Dec.
Interchemical Corp., Printing Ink Div. ..... Dec.
International Press Cleaner & Mfg. Co. ..... Dec.
International Paper Co. ..... Dec.
Intertype Corp. 4

Jomac Products ..... Dec.
J. F. Kelly, Inc. 128
Kimberly-Clark Corp. 16-17
Kleen-stik Products, Inc. 125
Knox Soap Co. 18
Korn Co., Henry P. 133

Lanston Monotype Machine Co. 62
Lawson Co., E. P. 101
Leedal Stainless Steel Products, Inc. ..... Dec.
Litho Chemical & Supply Co. 11
Lithographic Plate Graining Co. of America 123

Macbeth Arc Lamp Co. 102
Mack, Norman A., Associates 34
Mallinckrodt Chemical Works ..... Dec.
Mead Corp., The 84
Mergenthaler Linotype Corp. ..... 2nd Cover
Miehle Printing Press & Mfg. Co. 92-93
Miller Printing Machinery Co. 31
Minnesota Mining & Manufacturing Co. 26, 99
McAdams, John, & Sons ..... Dec.
Moreland Corp. 70

National Carbon Co., Div. of Union Carbide & Carbon Co. ..... Dec.
National Steel & Copper Plate Co. 119
Neenah Paper Co. ..... Nov.
Nekoosa Edwards Paper Co. 36
New York & Pennsylvania Co. 105
Northwest Paper Co. ..... Nov.
nuArc Co., Inc. 129
Nuclear Products Co. 126

Offen & Co., B. 132
Oxford Paper Co. ..... Dec.
Oxy-Dry Sprayer Corp. 103

Paper Manufacturers Co. ..... Nov.
Parsons Paper Co. 89
Paul, J. C., Co. ..... Nov.
Pitman, Harold M., Co. 35
Printing Machinery Co. ..... Nov.
Progressive Lithoplate and Supply Co. 132

Rapid Roller Co. ..... Dec.
Repro Graphic Machines, Inc. ..... Dec.
Reproduction Research Labs. Inc. 21-22
Roberts & Porter, Inc. 3
Roberts Co., Lewis ..... Dec.
Robertson Photo-Mechanix Inc. 117
Rogers Co., The Harry H. ..... Dec.
Roll-O-Graphic Corp. 73
Rosback Co., F. P. 118
Rutherford Machinery Co. ..... Nov.

Saltzman, J. G., Inc. 96
Schlanger, K. 132
Schmidt, H. & Co. 108
Schultz, H. J. 124-126
Scranton Plastic Laminating Co. 127
Scriber Specialties 132
Siebold, J. H. & G. B., Inc. ..... Dec.
Sinclair & Valentine Co. 14
Strathmore Paper Co. ..... Dec.
Stevenson Photo Color Separation Co., The 128
Strong Electric Corp. 80
St. Regis Paper Co. ..... Dec.
Sullebarger Co., E. F. 130
Sun Chemical Corp. ..... Sept.

Teitelbaum Sons, N. ..... Dec.
Tickle Engineering Works, Inc., Arthur 83
Toledo Lithograin & Plate Co. ..... Dec.
Trenton Times 128

Uniform Graining Corp. ..... Dec.
Vulcan Rubber Products 33

Wagner Litho Machinery Div. 78
Warren Co., S. D. 100
Warwick Typographers, Inc. 113
Watson-Standard Co. ..... Oct.
West Va. Pulp and Paper Co. ..... Dec.
Willy's Plate Graining Corp. 128
Wilson Printing Ink Co., W. D. 132
Winser & Newton, Inc. ..... Dec.

Young Brothers Co. ..... Oct.
Zarwell & Becker 130

(The advertisers' Index has been carefully checked but no responsibility can be assumed for errors or omissions.)

Tale Ends

EVERY Christmas we get a wide variety of beautiful lithographed Christmas cards from friends in all parts of the United States and foreign countries. We can't acknowledge them individually, but we would like to mention one sent by Rand McNally & Co., of Chicago, which this year celebrates its 100th anniversary. In connection with the centennial, the company sent out a card featuring a 100-year-old map of the U. S. The map shows how different the political framework of the nation was in 1856. Instead of 48 states, there were only 31, the most recent admission to the Union having been Wisconsin in 1846. Only two states were in existence in the western half of the country; Texas, admitted in 1845, and California, admitted in 1848.

Rand McNally's map first appeared in *Mitchell's New Universal Atlas*, annual editions of which were published in Philadelphia from 1847 to 1858. The map now is in the possession of the company. It is printed in eight colors, plus bronze for the border, and measures 17 inches by 27½.

ml

Carl Lethbridge, sales representative, Recording & Statistical Corp., Boston offset printers, is proving himself as a salesman, too, on his holidays and evenings, in helping teenagers of Melrose, Mass., his home town, in their social activities. Lethbridge gives youth talks each month at churches of his community, is manager of a basketball team and vice president of the Melrose High School Association. His most interesting basketball game was between boys under 5 feet and girls over 5 feet, with the boys wearing boxing gloves and playing under extra strict rules, and the girls having no rules at all.

ml

Lorin F. Wheelwright, president of Wheelwright Lithographing Co., Salt Lake City, recently was named chairman of the music and arts committee of the Salt Lake City Chamber of Commerce.

ml

Another striking greeting card received last month was the one sent us by The Composing Room, Inc. It was an 8 x 11" reproduction of a page from the "Holkham Bible Picture Book" which was lithographed at the Oxford University Press by Charles Batey and reproduced for Composing Room by permission of the publishers, The Dropmore Press, London. The card explained that the original manuscript of the "Holkham Bible Picture Book" has survived for six centuries and is the only one of its kind in existence. It contains 84 illustrated parchment folios, the leaf shown on the card being one of eight printed in full color.

•

Happy New Year

Keep That Sales Curve Headed Up!

The way to get sales moving in the right direction is to keep beating the bushes in season and out, — turning up new prospects to replace the old and worn out ones.

And what better way of locating some potential new accounts in the lithographic field than by a regular program of advertising in the industry's leading publication

MODERN LITHOGRAPHY

Box 31 **Caldwell, N. J.**

Member, Audit Bureau of Circulations

PLAN FOR QUALITY

The lights, shadows and middle tones of printed illustrations show to perfection on the uniformly smooth surface of brush-coated papers. For quality results with economy, by either letterpress or offset, specify Cantine Paper—brush coated for nearly 70 years.

LETTERPRESS
Hi-Arts
Ashokan
M-C Folding Book
M-C Folding Cover
Zena
Catskill
Velvetone
Softone
Esopus Tints
Esopus Postcard

OFFSET-LITHO
Hi-Arts Litho C. 1S.
Zenagloss C. 2S.
Zenagloss Cover C. 2S.
Lithogloss C. 1S.
Catskill Litho C. 1S.
Catskill Offset C. 2S.
Esopus Postcard C. 2S.
Esopus Tints C. 2S.

Photo. by Edw. Wilson.

Cantine's COATED PAPERS

THE MARTIN CANTINE COMPANY

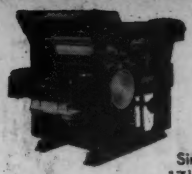
Specialists in Coated Papers Since 1888

SAUGERTIES, N. Y. *Branches:* NEW YORK *and* CHICAGO

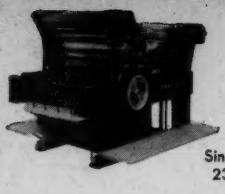
(In Los Angeles and San Francisco: Wylie & Davis

1956

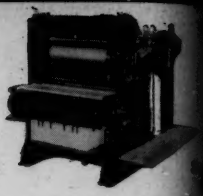
Single-color
14½ x 20½"

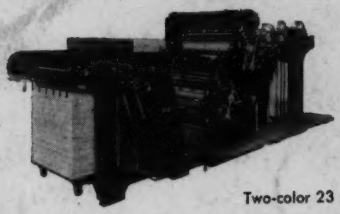


Single-color
17½ x 22½"

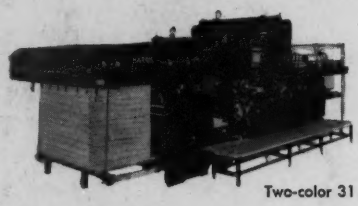


Single-color
23 x 30"

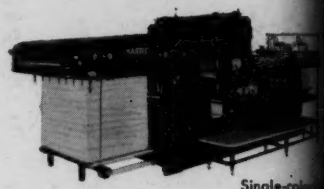




Two-color 23 x 36"

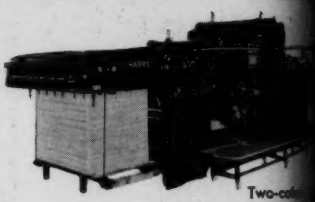


Two-color 31 x 43"



Single-color

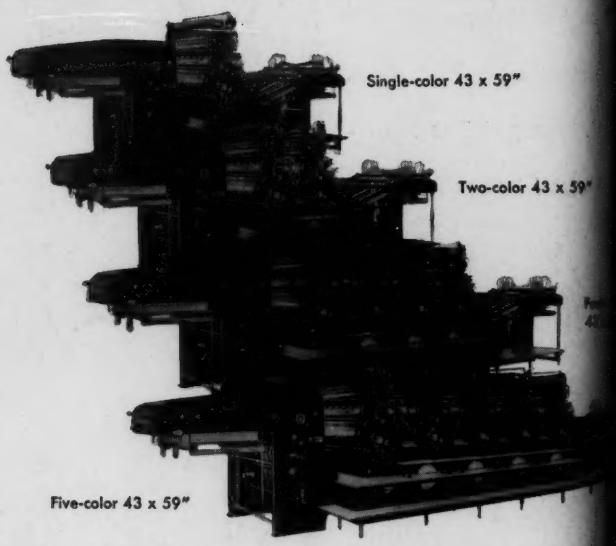
Pick Your Profit-Builder...



Two-color

You probably are a Harris press user. Most lithographers are . . . and there is a reason. Harris presses are profit-builders from away back. They are the world's most complete line, too. Built in a full range of sizes and models, they offer the widest selection to meet the particular needs of your plant.

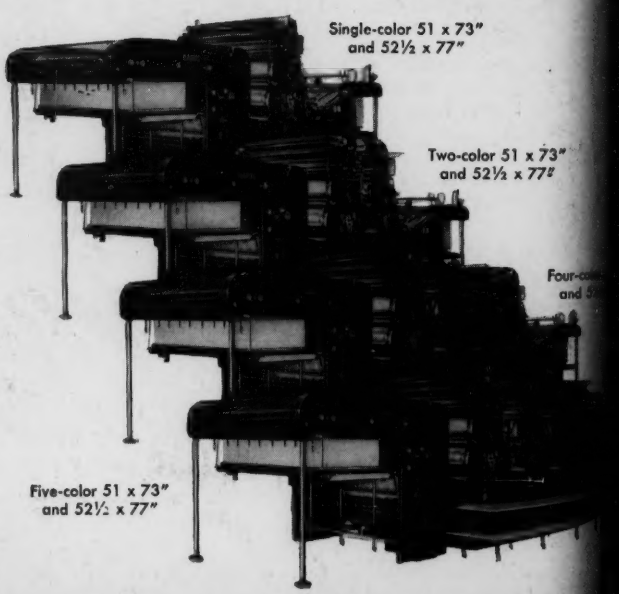
So, for your next offset press, choose another Harris profit-builder. Ask your Harris representative for the full story —or write Harris-Seybold Company, 4510 East 71st Street, Cleveland 5, Ohio.



Single-color 43 x 59"

Two-color 43 x 59"

Five-color 43 x 59"



Single-color 51 x 73"
and 52½ x 77"

Two-color 51 x 73"
and 52½ x 77"

Five-color 51 x 73"
and 52½ x 77"

HARRIS SEYBOLD COMPANY

HARRIS PRESSES

Harris Presses • Seybold Cutters • Harris Litho-Chemicals
Special Products • Cottrell Presses • Platemaking Equipment
Macey Collators